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National Energy Board

Reasons for Decision

**TransMountain Pipe Line
Company Ltd.**

RH-3-91



June 1992

Tolls

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National Energy Board

Reasons For Decision

Trans Mountain Pipe Line Company Ltd.

**Application dated 6 September 1991
for new tolls effective 1 January 1992**

RH-3-91

June 1992

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Recital and Appearances

IN THE MATTER OF the National Energy Board Act ("the Act") and the regulations made thereunder;

AND IN THE MATTER OF an application by Trans Mountain Pipe Line Company Ltd. dated 6 September 1991 for certain orders respecting tolls under Part IV of the Act;

AND IN THE MATTER OF the National Energy Board Directions on Procedure RH-3-91;

HEARD at Vancouver, British Columbia on 2, 3, 4, 5 and 6, March 1992 and at Calgary, Alberta on 27 March 1992.

BEFORE:

| | |
|-------------------|------------------|
| R.B. Horner Q.C. | Presiding Member |
| A. Côté - Verhaaf | Member |
| R. Illing | Member |

APPEARANCES:

| | |
|-------------------------------|---|
| C.B. Johnson M.W.P. Boyle | Trans Mountain Pipe Line Company Ltd. |
| W.M. Moreland | Alberta Petroleum Marketing Commission |
| D.A. Holgate | Canadian Petroleum Association |
| L.G. Keough | Independent Petroleum Association of Canada |
| C.W. Sanderson C.A. Ferris | Chevron Canada Limited |
| M.F. Campbell | Imperial Oil Limited |
| S.R. Miller W. Bishop | Petro-Canada Inc. |
| E.S. Decter B.W. Mitchell | Shell Canada Limited |
| D. Bursey | National Energy Board |

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Abbreviations

| | |
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| the Act | the National Energy Board Act |
| Airlines | Air Canada and Canadian Airlines International Ltd. |
| AFUDC | Allowance For Funds Used During Construction |
| AO | Amending Order |
| APMC | Alberta Petroleum Marketing Commission |
| base year | 1 January 1990 to 31 December 1990 |
| Board, NEB | National Energy Board |
| Chevron | Chevron Canada Limited |
| CIP | Continuous Improvement Program |
| CPA | Canadian Petroleum Association |
| DCF | Discounted Cash Flow |
| Gulf | Gulf Canada Resources Limited |
| Imperial | Imperial Oil Limited |
| IPAC | Independant Petroleum Association of Canada |
| IPL | Interprovincial Pipe Lines Inc. |
| MTBE | Methyl Tertiary Butyl Ether |
| m ³ | Cubic metre |
| m ³ /day | Cubic Metre per day |
| NGL | Natural Gas Liquids |
| Shell | Shell Canada Limited |
| ROE | Return on Common Equity |
| test year | 1 January 1992 to 31 December 1992 |
| Trans Mountain, TMPL or the Company | Trans Mountain Pipe Line Company Ltd. |

Overview

(Note: This overview is provided solely for the convenience of the reader and does not constitute part of this decision or the reasons, to which readers are referred for the detailed text and tables)

The Application

On 6 September 1991, Trans Mountain Pipe Line Company Ltd. applied to the National Energy Board (NEB) for new tolls to be effective 1 January 1992. The application proposed that rate of return on equity and capital structure issues be dealt with in an oral hearing and that all other issues, including rate base, cost of service and toll design issues be considered by written submission.

The Hearing

The evidentiary portion of the hearing was held in Vancouver and lasted one week from 2 to 6 March 1992. Argument was heard in the Board's hearing room in Calgary on 27 March 1992.

Revised Tolls

The Board approved new tolls for the 1992 test year 2.7 percent lower than the approved 1991 tolls. The Company had requested an increase in tolls of approximately 5 percent.

Revenue Requirement

Trans Mountain initially requested a revenue requirement of \$89,015,000 which was revised downward to \$86,288,000 during the hearing. The Board has approved a revenue requirement of \$84,592,000 which represents a small decrease from the approved 1991 revenue requirement of \$84,963,000.

Revenue requirement reductions result primarily from the reduced return on equity awarded of 12.5 percent versus the applied for rate of 14 percent which was later reduced to 13.5 percent and a reduction in the allowed common equity component of the deemed capital structure to 47.5 percent from 50 percent. The reduced equity return also resulted in a reduced income tax requirement. Other changes include an allowed provision of \$342,000 for the recently announced B.C. Capital tax and a decision to disallow \$150,000 of deferred relocation costs.

Rate Base

The test year rate base was reduced to reflect a lower level of Allowance For Funds Used During Construction (AFUDC) and the disallowance from rate base of \$253,000 of salaries and wages expense provided for in the 1991 test year revenue requirement which were charged to capital projects in the 1991 test year.

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Chapter 1

Background and Application

The Trans Mountain Pipe Line Company Ltd. (Trans Mountain or the Company) owns and operates a pipeline for the transportation of petroleum from receipt points in Alberta and British Columbia to points of delivery in British Columbia including refineries in the Vancouver area, the Westridge marine terminal and at the international boundary where the pipeline connects with a pipeline in the State of Washington owned by a subsidiary of the Company.

On 6 September 1991, Trans Mountain filed a Class 3 application pursuant to part IV of the National Energy Board Act (the Act) for new tolls to be effective 1 January 1992.

Prior to filing the application, Trans Mountain established two task forces in conjunction with interested parties in an effort to seek agreement on all issues of the Class 3 application including the allowed rate of return. As a result of these negotiations, which took place between March and August of 1991, a consensus was reached on a substantial number, but not all, of the outstanding issues.

The Company incorporated within its application all decisions upon which task force concurrence had been attained and proposed that the public hearing should be limited to consideration of the issues not resolved through the task force procedure. Trans Mountain suggested that all issues upon which concurrence had been attained by the task force should be considered in a written proceeding in the same manner as a Class 2 Tolls Application in accordance with the rules set out in Order TO-8-90.

On 31 October 1991, the Board issued Hearing Order RH-3-91 with Directions on Procedure specifying that the Board intended to examine the issues of allowed rate of return on equity and capital structure at the oral proceeding and that, unless directed otherwise by the Board, all other issues were to be dealt with by written submission. The oral portion of the hearing was to commence 13 January 1992 in Vancouver B.C.

In response to requests from various interested parties that the hearing be postponed to avoid conflict with other hearings before the NEB, the Directions on Procedure were amended on 4 December 1991 by order AO-1-RH-3-91 to provide for the oral portion of the proceeding to commence 2 March 1992.

As several parties had raised concerns that other issues should also be considered in the oral portion of the hearing, the Board, in a letter dated 6 December 1991, afforded parties an opportunity to suggest additional issues for consideration in the oral proceeding. On the basis of requests received, the list of issues to be considered in the oral portion of the hearing was expanded to include the following three additional issues:

- The need for Trans Mountain to undertake a depreciation rate study for review by the Board and the scope of such a study and the process by which the study and any alternatives to the resulting proposal should be examined.
- The appropriate toll design for the proposed facilities to be constructed to accommodate Methyl Tertiary Butyl Ether (MTBE) shipments.
- The adequacy of the existing throughput forecast methodology employed by Trans Mountain and an examination of alternatives.

The oral portion of the hearing was heard in Vancouver, British Columbia for five days from 2 to 6 March 1992 and argument on all issues was heard in the Board's hearing room in Calgary, Alberta on 27 March 1992.

Chapter 2

Revenue Requirement for 1992

The revenue requirement authorized by the Board for the period 1 January to 31 December 1992 (the test year) is \$84,592,000. A summary of the approved revenue requirement together with the Board's adjustments is shown in Table 2-1. The adjustments reflect the Board's decisions on rate base and return on rate base.

Table 2-1

**TRANSPORTATION REVENUE REQUIREMENT
FOR THE 1992 TEST YEAR
(\$000)**

| | Application as Revised | NEB Adjustment | Approved by NEB |
|---------------------------------------|---------------------------|-------------------------------|--------------------|
| Operating Expenses | 46,215 | | 46,215 |
| Other Revenues | (255) | | (255) |
| NEB Cost Recovery | 817 | | 817 |
| Plant Depreciation and Amortization | 9,072 | | 9,072 |
| Amortization of other Deferred Items: | | | |
| Inventory Cost | 207 | | 207 |
| Head Office Relocation | 150 | (150) ⁽¹⁾ | 0 |
| Amortization of Hearing Costs | 95 | | 95 |
| Provision for B.C. Capital Tax | | 342 ⁽²⁾ | 342 |
| Provision for Income Tax and LCT | 9,451 | (827) ⁽³⁾ | 8,624 |
| Return on Rate Base | <u>20,536</u> | <u>(1,061) ⁽⁴⁾</u> | <u>19,475</u> |
| Transportation Revenue Requirement | <u>86,288</u> | <u>(1,696)</u> | <u>84,592</u> |

Notes:

- (1) See Sec. 6.3 Deferred Relocation costs.
- (2) See Sec. 7.2 B.C. Capital Tax.
- (3) See Table 7-1.
- (4) See Chapter 8.

Chapter 3

Rate Base

Table 3-1 illustrates the rate base as applied for and the adjustments made in determining the approved rate base for the 1992 test year.

Table 3-1

RATE BASE FOR THE 1992 TEST YEAR
(\$000)

| | Per Application | NEB Adjustment | Approved by NEB |
|--|--------------------|-------------------|--------------------|
| Average Original Cost of Plant in Service | 323,593 | (253) (20) | 323,320 |
| Average Accumulated Depreciation | (137,331) | | (137,331) |
| Average Deferred Income Taxes | (22,007) | (36) | (22,043) |
| Allowance for Working Capital | <u>6,310</u> | <u>(461)</u> | <u>5,849</u> |
| | <u>170,565</u> | <u>(770)</u> | <u>169,795</u> |

3.1 Adjustments to Rate Base

3.1.1 Adjustment for AFUDC

The average rate base for the test year has been reduced by \$20,000 to reflect an adjustment to the forecast capital additions to rate base in the test year resulting from lower Allowance For Funds Used During Construction (AFUDC). The lower AFUDC provided for in forecast capital additions reflects the lower approved rate of return on common equity (ROE) as well as the reduced equity component in the approved capital structure.(see Chapter 8.) This adjustment represents the average balance outstanding in the year based on a \$40,000 reduction in AFUDC for the test year.

3.1.2 Adjustment To Plant In Service

Plant in service was reduced by \$253,000 to reflect the Board's decision at Chapter 6.2.3 to reduce gross plant by the amount of salaries and wages provided for in the 1991 tolls, transferred to rate base projects.

3.1.3 Adjustment to Average Deferred Income Taxes

Average deferred income taxes were adjusted downward by \$36,000 to reflect the Board's decisions in Chapter 8 on rate of return and capital structure.

3.2 Cash Working Capital

The allowance for cash working capital has been adjusted to reflect changes to the number of lead-lag days and operating expenses. These changes are discussed below and summarized in Table 3-2.

Table 3-2

1992 CASH WORKING CAPITAL (\$000)

| | Application as Revised | NEB Adjustment | Approved by NEB |
|--------------------------------|---------------------------|--------------------|--------------------|
| Cash Operating Expenses | 46,105 | 192 ⁽¹⁾ | 46,297 |
| Other Revenue | (255) | | (255) |
| Income Taxes Payable | <u>5,767</u> | <u>(1,191)</u> | <u>4,576</u> |
| Total Cash Cost of Service | <u>51,617</u> | <u>(999)</u> | <u>50,618</u> |
| Provision for Cash Requirement | 2,397 | (461) | 1,936 |
| Inventories | 3,350 | | 3,350 |
| Prepaid Expenses | <u>563</u> | <u>—</u> | <u>563</u> |
| Allowance for Working Capital | <u>6,310</u> | <u>(461)</u> | <u>5,849</u> |

Notes:

| | | |
|-----|--------------------------------|------------|
| (1) | Relocation Expenses Disallowed | (150) |
| | B.C. Capital Tax | <u>342</u> |
| | | <u>192</u> |

3.2.1 Provision For Lumpiness

Trans Mountain's applied-for cash working capital allowance included a provision for cash requirements based on an average of 17 lag days. The 17 lag days included seven days for "lumpiness". The Airlines argued that the seven-day provision is no longer necessary. They noted that Trans Mountain did not present a study to support the continued use of the seven days approved in the Board's 1985 decision and pointed to the fact that a similar provision for Interprovincial Pipe Line Inc. (IPL) was eliminated some time ago because the improved accuracy of lead-lag studies had rendered it unnecessary.

In response to a query from the Airlines, Trans Mountain indicated that it was continuing to use a seven-day provision for lag days because the NEB had approved it in 1985. In argument, the Company maintained that the application incorporated an appropriate method of calculating the lead-lag study.

Views of the Board

A provision for "lumpiness" has, in the past, been provided to recognize that there may be variations in the timing of the receipt of revenues and the payment of expenses which are beyond the control of the Company. Although the Board did approve a seven-day provision for "lumpiness" in 1985 in respect of Trans Mountain, no evidence was presented in this proceeding as to its continued appropriateness.

Since 1985 there have been general efficiency improvements that have reduced the variations in the timing of the settlement of accounts. As a result there is now less need for this provision. While the Board is not convinced that the provision should be eliminated at this time, the Board believes it should be reduced.

Decision

The Board has decided to reduce the allowance to four days. The Board will review the continued need for this provision in its next proceeding.

3.2.2 Operating and Maintenance Expense Adjustments

A major portion of the working capital allowance is the provision for cash requirements. This provision is calculated by multiplying the total annual cash cost of service by the approved lead lag days divided by the number of days in the year. The working capital provision for the test year has been adjusted to reflect changes in the allowance for operating and maintenance expenses and income taxes as discussed in Chapters 6 and 7.

3.3 Completion Rate for Projects in the Test Year

The Independent Petroleum Association of Canada (IPAC) noted that when Trans Mountain forecasts that it will incur expenditures on capital projects in a test year which are not, in fact, completed within the test year, then the Company earns a return on money that is not spent. This occurs because the rate base is calculated on the assumption that the new assets will go into service at a given date during the year. In IPAC's view, it is totally unacceptable that Trans Mountain earn a return on money that has not

been spent. IPAC urged the Board to review all project deferrals which had taken place from 1987 to the current test year, and to include as a credit to the 1992 test year revenue requirement, an amount equal to the extra return earned on projects deferred during this period.

In response, Trans Mountain argued that this is a forecasting issue and that in some cases projects are not completed in the year as forecast. On the other hand, the Company pointed out that there are supplemental capital projects which are not provided for in the approved forecast of rate base additions. The Company also provided evidence that since 1980 actual additions to rate base totaled ninety-nine percent of the amounts approved for rate base additions.

Views of the Board

Forecast rate base additions are, by their nature, subject to some variance. It is the Board's practice to closely review the reasonableness of forecast rate base additions and the Company's past record of accuracy, when approving forecast project costs for inclusion in the test year rate base. In the present case the Board is satisfied that Trans Mountain has made reasonable efforts to accurately forecast its rate base additions. The Board will continue to monitor the Company's forecasting accuracy in the future.

Decision

The Board has decided that no adjustment to Trans Mountain's forecast capital additions for the test year is required.

3.4 Need for Depreciation Study

In their letter of intervention, Air Canada and Canadian Airlines International (Airlines) suggested that a full review of Trans Mountain's depreciation rates should be an issue in this application. In support of this position, the Airlines noted that no study had been done since 1984 and referred to the significant capital additions which have been made since then. In response to the Airlines request, the Board included in the List of Issues for the oral portion of the hearing, the question of the need for Trans Mountain to undertake a depreciation study for review by the Board and the scope of such a study and the process by which the study and any alternatives to the resulting proposal should be examined. The Airlines submitted no further comments on the need for a study.

In argument, Trans Mountain took the position that a depreciation study was not desirable at this time. It maintained that new depreciation rates based on a current depreciation study would be higher than the existing rates of depreciation and could cause tolls to increase at a difficult time for the industry. It also expressed the view that the treatment of negative salvage should be resolved by the Board before a depreciation study is undertaken.

The only other party to express a view on the need for a study was Gulf Canada Resources Limited (Gulf). Gulf maintained that they could see no cost benefit to Trans Mountain in undertaking a depreciation study. In Gulf's view depreciation rates are self-regulating. If the Company sets rates too high, the rate base will disappear; if rates are set too low, the Company runs the risk of not recovering its costs.

Decision

The Board finds that there is no demonstrated need for a depreciation study at this time.

3.5 Line Fill and Working Stock and Operational Issues

While operational issues pertaining to line fill and working stock were not at issue during this proceeding, the Company indicated in its application that such issues had been discussed during task force meetings and that some outstanding operational issues were identified. The Board notes the resolution of the task force that Trans Mountain will establish a Shipper Advisory Group which is to meet on a regular basis to address ongoing operational issues.

Chapter 4

Efficiency Considerations

4.1 Continuous Improvement Program

Based on discussions held by Trans Mountain and parties prior to the filing of the application, it was resolved that Trans Mountain would be committed to the establishment of a Continuous Improvement Program. In its application, Trans Mountain described this program as a systematic approach to managing and leading business based on continuous feedback on performance and recognition for specific measurable success.

The establishment of such a program was supported by all parties. The CPA indicated strong support for the program. Shell Canada Limited (Shell) indicated that it had shared information with Trans Mountain on its experience with such a program and Gulf noted that the philosophy of such a program in Gulf's pipeline operations over the past several years had resulted in significant savings to both shippers and owners.

The APMC indicated that while they had not initially supported the establishment of the Continuous Improvement Program, the potential benefits and minimal cost allowed them to agree to support the initiative. In argument the APMC referred the Board to the evidence of Trans Mountain's witness that the Company would be preparing written status reports with predictive forecasts of the results expected. The APMC requested that the Board require that these reports be filed with the Board and included with quarterly surveillance reports.

IPAC supported the idea but argued that the program should be tied to specific results, not necessarily profitability. They suggested specific productivity measures such as manpower per pumping unit, overhead and administration costs per unit of throughput and percentage of on-time deliveries, to mention a few. IPAC urged the Board to ensure that appropriate goals, objectives and reporting mechanisms are in place before Trans Mountain embarks on such a program.

Views of the Board

The Board does not believe that the introduction of a Continuous Improvement Program within Trans Mountain should be considered as a substitute for clearly defined corporate goals and the continuous application of rigorous and dynamic management practices by Trans Mountain's executives and management. In this regard the Board recognizes the point of view expressed by Trans Mountain's chief policy witness. However, it may be that the Continuous Improvement Program will enhance Trans Mountain's existing management practices and prove to be cost effective. Therefore, the Board supports

initiation of the Continuous Improvement Program, but expects that within the first year clear objectives and efficiency and service level targets for the program will be established and that several will be achieved. In the second year of its application, it is expected that all consultant and internal costs of the program should be recovered through efficiency gains and that additional significant cost reductions and service level improvements should be planned for and achieved to demonstrate the efficacy of the program.

The Board will monitor the progress of this initiative to ensure that it is based on clearly defined objectives, is cost effective for all parties and that service levels are maintained or improved.

Decision

Trans Mountain shall implement its proposed Continuous Improvement Program and include with its quarterly surveillance reports to be filed with the Board a report of the progress made to date, planned activity and an estimate of the benefits, both financial and non-financial, actually achieved or planned.

4.2 Incentive Regulation

IPAC submitted that the time has come to apply additional pressure on regulated pipeline companies to ensure they are operating in the most cost efficient manner and providing their utility services at the least cost to system users. Its starting premise is that the existing method of regulation does not provide sufficient motivation to the utility to reduce costs and improve performance. Rather, they submit, traditional regulation places the responsibility for the scrutiny of the utility's cost structure on the regulators and the tollpayers. This process has, in the view of IPAC, virtually absolved monopoly utilities from taking meaningful steps towards improved performance.

IPAC suggested in argument that if the Board was not prepared at this time to implement a form of incentive regulation for just one company under its jurisdiction, it should consider holding a generic proceeding to address this issue. In this regard it should be noted that in a letter issued 23 March 1992, the Board initiated a public consultation process in respect of incentive regulation. The results of these consultations should be available prior to the next Class 3 proceeding regarding Trans Mountain's tolls.

Chapter 5

Rate Of Inflation

It was the evidence of the Company's expert witness, Dr. Evans, that at the time of the oral hearing the Consensus Economic Survey indicated an inflation rate for 1992 of 2.6 percent and the Central Trust Survey forecasted a range of 3.3 to 3.5 percent. Dr. Evans forecasted a range of 3 to 3.5 percent, expressing the view that pressure to keep interest rates low in the United States during the current election year was causing economic activity to pick up. The spill-over of such activity into Canada would probably result in upward pressure on Canadian interest and inflation rates, particularly in the period after the election.

The witness for the Canadian Petroleum Association (CPA) and the Alberta Petroleum Marketing Commission (APMC), Dr. Waters, estimated that inflation for 1992 would probably be around 3 percent. For the longer term he forecasted inflation around 4 percent over the next five years. In this regard he suggested that nothing had happened, either in Canada or the United States, to suggest that government deficits are going to be any lower and that continued deficits could result in upward pressure on interest rates.

The IPAC witness, Mr. J.G. Weir, used a range of 2 to 3 percent based on the Conference Board forecast in late December 1991 of 2.7 percent for 1992. The witness stressed the lower end of the range, noting the stated goal of the Governor of the Bank of Canada to reduce the rate of inflation in Canada to zero, a goal which the witness believes will be achieved.

Views of the Board

The Board notes that recent inflation estimates from the Conference Board of Canada forecasted 1992 inflation rates of 2.2 percent for the country as a whole, with forecasts of 2.2 percent for Alberta and 2.4 percent for British Columbia. The Board believes that economic activity in the Vancouver area will be somewhat higher than in other regions of the country and therefore, inflationary pressures may also be greater in that region. In considering this application the Board has used an inflation rate forecast of 2.5 percent for 1992.

Chapter 6

Cost of Service

6.1 Cost Allocation to Non-Utility Operations

It was Trans Mountain's evidence that the issue of how costs are allocated to non-utility operations was discussed by the parties at task force meetings. It was resolved that the current allocation methodology continued to be acceptable. During the oral portion of the hearing IPAC expressed concerns about discrepancies it believed to exist in connection with costs allocated to the Company's Low Point Project in the State of Washington.

In response to an IPAC information request, Trans Mountain had indicated that \$641,000 of 1990 salaries and wages expense had been charged to Project Development and Deferred Projects. IPAC noted that Trans Mountain's 1990 annual report showed expenditures on deferred costs amounting to a net of \$3.6 million and total costs charged to the Low Point Project to the end of 1990 of \$1.4 million. IPAC questioned the discrepancy between these amounts.

Trans Mountain explained that the \$ 1.4 million referenced in the annual report represents all of the costs associated with the Low Point Project including consultant's and legal fees and the cost of maintaining an office in Seattle. The \$641,000 of costs represented only the salaries and wages costs charged to all deferred projects in 1991.

Decision

The Board is satisfied with the explanations provided by Trans Mountain and finds that the current allocation methodology continues to be acceptable.

6.2 Salaries and Wages

6.2.1 Person-Year Requirements

Trans Mountain has forecast its year-end staff complement to remain unchanged at 247. The actual average person-year utilization in 1991 was somewhat lower at 242 due to staff turnover. It was the Company's evidence that the forecast 1992 gross salaries had been reduced by one half of one percent to allow for expected vacancies in the test year.

Decision

The Board is satisfied with the reasonableness of the assumptions underlying Trans Mountain's person-year requirement forecast for the test year and finds the budgeted person year complement of 247 to be acceptable.

6.2.2 Salary and Wage Increase

Trans Mountain originally proposed to increase salaries and wages in 1992 by 5 percent. In response to an information request, Trans Mountain stated that the data supported a salary adjustment in the range of 4 to 5 percent, but that in response to current economic conditions in the Canadian petroleum industry, it was reducing its forecast increase to 4 percent. In its final adjustment to the application, the Company stated that in response to a further review of economic conditions in western Canada, in general and in the petroleum industry specifically, it made further reductions. The result of these reductions was that effective 1 January 1992, salaried staff received a 3.5 percent merit increase with a planned increase of 3 percent for fixed rate staff and a further one-half percent budgeted for progression. The Company reduced its applied-for increase in base payroll to 3 percent and indicated that an anticipated one-half percent vacancy rate for the test year would allow the Company to administer an overall salary adjustment of 3.5 percent. It was Trans Mountain's evidence that over the last five years, vacancies had accounted for 0.52 percent of total salaries and wages.

The Airlines, in their written submission, noted that the Company had lowered its salary increase estimate to 4 percent and noted that still lower estimates for 1992 were becoming known and would require consideration in the final decision.

IPAC urged the Board to use an inflation factor of 2 percent for salary increases in 1992 as there was no evidence on the record to justify an increase to reflect any productivity gains.

Views of the Board

The Vancouver economy has been less affected by the current economic slowdown than the rest of the country. However, in the Board's view, the Company's 3.5 percent salary and wage increases appear generous when viewed in the context of the latest available Conference Board of Canada inflation forecasts of 2.4 percent for British Columbia and 2.2 percent for Alberta in 1992. Although the Board considers the awarded increases to be at the higher end of the range of reasonableness, this view is tempered by the recognition that the increases allowed by Trans Mountain at the start of the test year were made consistent with the information available at that time. In setting increases for 1993 the Company is expected to take into account the Board's views on the level of this approved increase for 1992.

Decision

The Board finds the requested salary increases for the test year to be acceptable.

6.2.3 Capitalized Salaries and Wages Expense

Trans Mountain's 1991 year-end surveillance report showed a variance between the amount of salaries and wages costs provided for in 1991 tolls and the actual amount expensed. According to Trans Mountain, transfers to balance sheet accounts were greater than expected. The Company noted that the variance was significantly influenced by supplemental capital projects.

IPAC cross-examined extensively on this issue. They argued that the practice of charging labour costs provided for in the cost of service to balance sheet accounts amounted to charging twice for the same service, once in the cost of service and again through depreciation and return on the capitalized labour costs.

Trans Mountain maintained that no double recovery occurs because the costs charged to the additions to rate base are no greater than they would be if outside labour was used for the projects. The evidence indicated that some discretionary maintenance work scheduled to be performed in 1991 had been deferred until 1992 because staff was working on capital projects.

The CPA argued that if the Company could transfer its employee resources from operational duties to capital projects without a deferral or reduction in maintenance and operating activity there must be some "fat" in the system that should be trimmed. The Company maintained that the postponed activity would be made up by the maintenance crews themselves. It stated that there was no provision in the forecast 1992 operating expenses for work not performed in 1991. It further stated that it is Company policy to budget out-of-pocket operating costs only once, even if the associated activity is postponed to a future period.

The APMC argued that what was at issue was the perception that the utility has the potential to arrange its spending in such a way as to effect a recovery of total salaries in excess of the amount approved. It believed that a more detailed segregation of planned salary expenditures in the application and a correspondingly detailed accounting for these costs in the Company's quarterly surveillance reports would better allow both the Board and interested parties to satisfy themselves that salaries are not being inappropriately allocated.

The CPA argued that this problem occurred because salary allocation for cost of service purposes is based on a forward test-year forecast whereas amounts finally transferred to capital and non-jurisdictional items are based on actual costs. They argued that the use of forecasts for setting tolls and actual costs for transfers to capital projects creates a situation in which the pipeline may over-recover from its shippers. The CPA suggested that either the forecast or actual cost method should be used for both cost of service and capital project purposes.

IPAC referred to a Trans Mountain exhibit which showed that in 1991 unbudgeted transfers to non-jurisdictional capital projects and rate base totalled \$132,000 and \$253,000 respectively. IPAC proposed several actions including billing the Company for employee time spent on non-jurisdictional projects, crediting the 1992 cost of service for all amounts of unbudgeted capitalized salaries for the period 1986 to 1991 and requiring full reporting of such activities in future quarterly surveillance reports.

Views of the Board

The Board recognizes that the setting of tolls on a forward test year basis involves the use of estimates and forecasts. Whenever forecasts are used some degree of forecasting error is to be expected. With this in mind the Board is not overly concerned when small variances occur. However, in this case the variance was significant, representing approximately five percent of the total 1991 payroll forecast.

The Board does not accept Trans Mountain's assertion that double recovery does not occur when Company employees, instead of outside contractors, work on capital projects. Even though the capital project costs may have been the same if outside contractors had been used, it is also true that the costs of the time those employees spent on capital projects was recoverable through the approved operating and maintenance expenses reflected in the 1991 tolls. To the extent that those employees had more time available to work on capital projects than was originally forecast, it was an efficient use of their time to have them do the work. In this regard, the Board encourages the Company to pursue such opportunities

for cost savings and operational efficiencies whenever available. However, this practice should not result in the addition to rate base of payroll costs provided for in tolls.

Decision

The 1991 additions to gross plant in service shall be reduced by the amount of \$253,000, being the amount of salaries and wages provided for in 1991 tolls transferred to rate base projects.

6.3 Deferred Relocation Costs

Trans Mountain acknowledged that it had not applied for a deferral account to collect these costs. In response to a request for information from the Board as to the authority for this deferral of costs, the Company stated that as the first year in the new premises were rent free, the deferred treatment of the non-capital portion of the relocation costs would be appropriate in the interest of stabilizing tolls.

Views of the Board

It is not the practice of the Board to allow for the recovery of costs incurred in a prior period, unless the tolls were interim tolls, or a specific deferral account had been authorized, in advance by the Board.

Decision

The Board has disallowed the recovery of \$150,000 of deferred relocation costs as no prior authority was granted for the deferral of such costs.

6.4 Toll Hearing Costs

In its application, Trans Mountain provided for the amortization of toll application costs over two years. Trans Mountain estimated that its toll hearing costs would amount to \$190,000 and included \$95,000 in its forecast 1992 revenue requirement. No parties commented on the estimated costs or Trans Mountain's proposal to amortize these costs over two years.

Decision

The Board finds the Company's proposal to amortize the toll hearing costs over two years to be acceptable and approves the inclusion of \$95,000 on account of toll hearing cost amortization in the test year revenue requirement

Chapter 7

Income and Capital Taxes

7.1 Income Taxes

In its application, Trans Mountain calculated a provision for income taxes at a rate of 43.11 percent. On 26 March 1992, the Province of British Columbia announced an increase in its corporate tax rate from 15 percent to 16 percent. Based on this information the Board has recalculated Trans Mountain's effective tax rate for 1992 to be 43.89 percent.

Table 7-1 presents the calculation of the provision for corporate income taxes for 1992 based on the approved rate base and rates of return.

Table 7-1

**PROVISION FOR CORPORATE INCOME TAXES AND
LARGE CORPORATION TAX (LCT)
(\$000)**

| | Application as Revised | NEB Adjustment | Approved by NEB |
|-----------------------------------|---------------------------|-------------------|--------------------|
| Return on Rate Base | 20,536 | (1,061) | 19,475 |
| Less: Deemed Interest Component | <u>(9,023)</u> | <u>(367)</u> | <u>(9,390)</u> |
| Return on Deemed Equity | 11,513 | (1,428) | 10,085 |
| Depreciation on Excluded Plant | 4 | | 4 |
| Depreciation of Equity AFUDC | 238 | | 238 |
| Other Permanent Differences | <u>(153)</u> | <u>—</u> | <u>(153)</u> |
| Normalized Income After Tax | <u>11,602</u> | <u>(1,428)</u> | <u>10,174</u> |
| Provision for Income Taxes | 8,792 | (833) | 7,959 |
| Provision for LCT | 375 | (2) | 373 |
| Provision for Income Taxes on LCT | <u>284</u> | <u>8</u> | <u>292</u> |
| Total Provision | <u>9,451</u> | <u>(827)</u> | <u>8,624</u> |

7.2 B. C. Capital Taxes

The British Columbia provincial budget of 26 March 1992, provided for a Provincial Capital Tax of three tenths of one percent on paid-up capital. Trans Mountain estimated that the 1992 B.C. Capital Tax attributable to regulated operations would be approximately \$342,000.

Decision

The Board has decided to allow \$342,000 for B.C. Capital Taxes in Trans Mountain's 1992 revenue requirement.

7.3 Income Tax Methodology

The matter of how a company calculates its income tax provision has been an issue in recent proceedings before the Board. Trans Mountain currently calculates its income tax provision on a normalized basis. Average deferred taxes are expected to be over \$22 million with the deferred tax balance growing by over \$3.5 million in the test year. In view of Trans Mountain's continuing capital additions, it is likely that the deferred tax balance will continue to grow for many years. Moreover, the Board is conscious of the current depressed state of the petroleum industry and the need to look critically at all measures that will reduce costs to users. A change in the income tax methodology from the currently used normalized method to a flow-through method would represent a substantial reduction in the revenue requirement.

Nonetheless, the Board is cognizant of the fact that the income tax methodology was not an issue in this proceeding. Accordingly, this matter will be considered in a future hearing in respect of Trans Mountain Tolls.

Chapter 8

Capital Structure and Cost of Capital

Trans Mountain initially applied for a deemed common equity ratio of 50.0 percent and a return on common equity of 14.0 percent unchanged from its currently approved level. The applied-for embedded debt cost of 10.57 percent was lower than the currently approved rate of 14.51 percent. This reduction was due to recent long term debt issues replacing a large balance of unfunded debt in the capital structure at a lower rate.

Recognizing the change in the economic environment, Trans Mountain, prior to the commencement of the current hearing revised the applied-for rate of return on common equity of 14.0 percent by 50 basis points to 13.50 percent, while leaving the applied-for deemed common equity ratio of 50.0 percent unchanged. This results in an overall requested rate of return on rate base of 12.04 percent for the test year ending 31 December 1992. This rate of return on rate base figure compares to the existing approved rate of 12.37 percent. The applied-for deemed capital structure, the corresponding individual cost rates, as revised, and the overall requested rate of return are shown in Table 8-1.

Table 8-1

**APPLIED-FOR DEEMED AVERAGE CAPITAL STRUCTURE
AND RATES OF RETURN FOR THE TEST YEAR**

| | Amount (\$000) | Capital Structure (%) | Cost Rate (%) | Cost Component (%) |
|-----------------------------|-------------------|-----------------------------|------------------|--------------------------|
| Funded Debt | 85,283 | 50.00 | 10.57 | 5.29 |
| Common Equity | <u>85,282</u> | <u>50.00</u> | 13.50 | <u>6.75</u> |
| Total Capitalization | <u>170,565</u> | <u>100.00</u> | | |
| Rate of Return on Rate Base | | | | <u>12.04</u> |

8.1 Deemed Common Equity Ratio

In support of the applied-for equity ratio of 50.0 percent, Trans Mountain relied on the recommendations of its expert witness, Dr. Evans. He took the view that, if the Board were to award a deemed common equity ratio of 40.0 percent, as recommended by the CPA/APMC's expert witness, Trans Mountain's debt rating would very likely be lowered, its borrowing costs could go up by 25 to 50 basis points, interest coverages would be lower and Trans Mountain's financing flexibility would be diminished as investors and bond rating agencies would view this change negatively. During cross-examination Dr. Evans stated that, if the Board were to approve his recommended common equity ratio of 50.0 percent, interest coverages resulting from that equity ratio for the test year would be lower than those in 1986 with the implication that interest coverages resulting from 40.0 percent common equity ratio would be even lower.

The expert witness for the CPA/APMC, Dr. Waters, recommended a deemed common equity ratio of 40.0 percent for Trans Mountain. In doing so he took the view that while it was possible that if the Board were to approve his recommended level of common equity ratio, Trans Mountain's interest coverage ratios and debt rating could be lowered, he did not consider these to be serious consequences. During cross-examination the CPA/APMC's expert witness expressed the view that Trans Mountain is a quality credit and capital markets have a great appetite for high quality utility bond issues. Dr. Waters further added that TCPL has recently been able to raise large sums of debt capital at reasonable rates with a 30.0 percent deemed common equity ratio. Trans Mountain should have no difficulty raising debt capital with a 40.0 percent common equity ratio. In his written evidence and during cross-examination Dr. Waters took the view that, Trans Mountain's unregulated business activities are of higher risk than those of its regulated pipeline operations, however, the underpinning common equity for the unregulated assets is less than that for the regulated assets.

IPAC relied on the advice of its expert witness, Mr. J.G. Weir to assess the appropriateness of the level of earnings experienced by Trans Mountain. During cross-examination Mr. Weir stated that he did not assess the business risks faced by Trans Mountain as this task was not within the scope of his assignment. However, Mr. Weir also took the view that the common equity underpinning the unregulated business activities of Trans Mountain is insufficient, as these business activities are of higher risk than the investment in the rate base of Trans Mountain's pipeline operations. During cross-examination Mr. Weir said that a 40.0 percent deemed common equity ratio for Trans Mountain is appropriate as it would leave sufficient common equity for its unregulated business operations. When asked, Mr. Weir stated that a lower deemed common equity ratio may have some negative impact on Trans Mountain's debt rating, however, the magnitude of this change would not be material and moreover, in the current financial environment investors are expecting lower returns. In the final argument, IPAC supported the 40.0 percent deemed common equity ratio as recommended by CPA to be reasonable for Trans Mountain.

The expert witness for Trans Mountain identified certain business risks facing Trans Mountain such as customer diversification and composition risks, regulatory risks, environmental risks and throughput related risks. When asked to quantify the impact of these individual risks on Trans Mountain's operations, the witness took the view that, in aggregate, setting aside the resolution of the vanishing rate base problem, the Company's business risks are somewhat lower today than in 1986. However, if the resolution of the vanishing rate base problem is taken into consideration, the business risks facing Trans Mountain today are significantly lower than in 1986. Debt rating agencies have acknowledged this through improved debt ratings for Trans Mountain. Trans Mountain's expert witness in his direct

evidence and during cross-examination took the position that at the time of Trans Mountain's last Class 3 toll hearing in 1986, in making his rate of return and common equity ratio recommendation, he did not give any weight to the vanishing rate base problem, nor did he give any weight to this issue in the current proceeding, and the Board should do the same.

During cross-examination, the Trans Mountain Panel agreed with their expert witness that business risks facing the Company today are lower than in 1986. This panel further acknowledged that the financial results of Trans Mountain's unregulated operations have a negative impact on the consolidated interest coverage ratios of Trans Mountain.

The expert witness for the CPA/APMC was of the view that Trans Mountain's business risks are not materially different today than those at the time of last Class 3 toll hearing in 1986. However, the resolution of the vanishing rate base problem indicates the overall business risks are directionally lower. In the final argument the CPA argued that since 1986, Trans Mountain's rate base has increased substantially, the Company has diversified its regulated business operations to include MTBE, further diversification to include more products is being planned and, consequently its business risks are lower today than in 1986 and therefore a lower deemed common equity ratio is warranted.

There was some discussion on the relative risks of the oil and gas pipeline companies. Trans Mountain's expert witness in his direct evidence stated that Trans Mountain's business risks are substantially higher than those of the gas pipeline companies regulated by the Board. The expert witness for the CPA/APMC agreed with this statement in a macro sense, however he differs on the relative risk differential between oil and gas pipelines. In the final argument IPAC shared the CPA's views that the relative risk differential between oil and gas pipeline companies is not as significant as portrayed by the expert witness for Trans Mountain.

Views of the Board

Based on the evidence put forward in respect of Trans Mountain's operations, the Board is of the view that as indicated by its improved debt rating, the risks facing the Company at the time of the current proceeding are lower than those at the time of its last Class 3 toll hearing in 1986. The Board also notes that the financial performance of the Company's unregulated business operations have a somewhat negative impact on the consolidated interest coverage ratios for Trans Mountain.

The Board is of the view that a decision to lower the deemed common equity ratio to the 40.0 percent level recommended by the expert witness for CPA and APMC, at this time, may adversely affect the debt rating for the Company. However, while the Board is not inclined to reduce the deemed common equity ratio to such a level at this time, the Board is likewise not persuaded that the currently approved common equity level of 50.0 percent is warranted.

Decision

The Board approves a deemed common equity ratio of 47.5 percent for the purposes of determining the allowed rate of return on rate base.

8.2 Cost of Capital

8.2.1 Cost Rate of Funded Debt

The long-term debt component of the deemed capitalization represents the average projected test-year balance of debt capital associated with the financing of the average projected rate base. The Company applied for an embedded cost rate of 10.57 percent calculated on a weighted average basis for its long-term debt. In its application the Company stated that the Rate of Return Task Force has agreed that the applied for embedded debt cost was appropriate for the test year.

No intervenor took issue with the applied-for embedded cost of Trans Mountain's long-term debt.

Decision

The Board approves the inclusion of long-term debt in the deemed capital structure used for toll-making purposes, and the embedded cost rate of 10.57 percent for the test year.

8.2.2 Cost Rate of Unfunded Debt

Unfunded debt represents that portion of long-term debt which remains to be raised by future debt issuance. This figure is the difference between total capitalization less the funded debt balance and the common equity balance. Trans Mountain in its applied-for capitalization had no unfunded debt balance and therefore, no request was made to approve a cost rate for unfunded debt as the applied-for capitalization included 50.0 percent long-term debt and 50.0 percent common equity. However, the Board has approved a deemed common equity ratio of 47.5 percent and, as such, an unfunded debt totalling 2.5 percent of the deemed capitalization was created on which the Board needs to approve an appropriate cost rate.

In reaching its conclusion on the appropriate cost rate for Trans Mountain's unfunded debt balance, the Board considered the amount of unfunded debt relative to the total deemed capitalization, the forecast long-term Government of Canada bond rates for the test year put forward by the expert witnesses for Trans Mountain and intervenors, an appropriate risk premium between long-term Government of Canada bond rates and the Corporate debt securities and the short-term rates at which the Company could raise funds using money market instruments.

Decision

The Board approves a cost rate of 9.50 percent for Trans Mountain's unfunded debt.

8.2.3 Rate of Return on Common Equity

In its original application, Trans Mountain applied for a rate of return on common equity of 14.0 percent. In its amended application, this rate was revised downward to 13.5 percent. In requesting a revised rate of return on equity of 13.5 percent the Company relied on the advice of its expert witness (Dr. Evans), who based his recommendation on his consideration of the comparable earnings, discounted cash flow and equity risk premium approaches for estimating the cost of common equity capital.

CPA and APMC also presented evidence on this issue. Their expert witness (Dr. Waters) originally recommended a rate of return on common equity of 12.0 - 12.25 percent. Taking into account the changes in U.S. and Canadian long-term interest rate spreads and the exchange rate between the U.S. and Canadian dollar since his evidence was filed, the witness focused on the lower end of his range. In determining what he thought to be a fair and reasonable rate of return on common equity for Trans Mountain, Dr. Waters relied on the results obtained from his discounted cash flow (DCF) and equity risk premium analysis.

Brief descriptions of the three tests, comparable earnings, discounted cash flow and equity risk premium method follow.

Comparable Earnings

This technique attempts to satisfy the criterion that the regulated utility be permitted to earn rates of return on invested capital commensurate with those of non-regulated enterprises of similar risk. This approach can be considered an "opportunity cost" approach in that the fair rate of return is determined on the basis of returns foregone in investments of similar risk.

Discounted Cash Flow

This technique examines the required rate of return of an investor in the stock of a company of similar risks to the utility. It is based on the premise that an individual invests in common stock with an expectation of returns on that investment from two possible sources: the dividend stream and capital appreciation, i.e. the gain expected when the stock is sold at the end of the holding period. Accordingly, the expected return is made up of two components: a dividend yield component and a growth factor component. This technique further assumes that the current price of a stock reflects the market's expectations for both of these elements. The investors' expected rate of return is the discount factor used to equate these two elements to the present value of the investment.

Equity Risk Premium

This technique is based on the premise that an investment in common equity carries greater risk than an investment in either debt or preferred stock, and therefore requires a higher return or premium over that required for bonds or preferred shares. Risk premiums, for a sample of reasonably similar companies to the utility in question, are determined as the difference in investors' expectations for common stock returns relative to those for bonds or preferred shares. The equity risk premium determined for the sample may then be adjusted to reflect the risk level of the utility stock relative to the stocks of companies included in the sample.

The Company's expert witness and the expert witness for CPA/APMC applied some or all of these tests to arrive at their recommended rate of return on common equity for Trans Mountain and the results of various tests are summarized in the following tables:

Table 8-2

Dr. EVANS' TEST RESULTS
(for Trans Mountain)

| | Investors' Required Rate of Return % | Adjustment for Market to Book Ratio % | Adjusted Test Results % | Fair Rate of Return % |
|-----------------------|--|---|----------------------------------|--------------------------------|
| Comparable Earnings | 13.75-14.25 | N/A | 13.75-14.25 | 13.75-14.25 |
| Discounted Cash Flow | 13.00-13.25 | 0.60-1.25 | 13.60-14.50 | 13.75-14.25 ⁽¹⁾ |
| Equity Risk Premium | 13.00 | 0.60-1.20 | 13.60-14.20 | 13.75-14.00 ⁽¹⁾ |
| Recommended ROE | | | | 13.75-14.25 |
| Final Recommended ROE | | | | 13.25-13.75 ⁽²⁾ |

Notes:

1. Dr. Evans focused his fair rate of return for the DCF and Equity Risk Premium tests on the mid-point of his adjusted test results.
2. Dr. Evans adjusted his recommended ROE downward by 50 basis points during the hearing to reflect prevailing financial conditions and focused on the mid-point of this range.

Table 8-3

Dr. WATERS' TEST RESULTS
(for CPA & APMC)

| | Investors' Required Rate of Return % | Adjustment to Reflect Lower Risk of Pure Utilities % | Adjusted Test Results % | Fair Rate of Return % |
|----------------------|--|---|----------------------------------|--------------------------------|
| Comparable Earnings | N/A | N/A | N/A | N/A |
| Discounted Cash Flow | 11.0 | (.60-.80) | 10.2-10.40 | 10.25-10.50 ⁽¹⁾ |
| Equity Risk Premium | 11.2-11.8 | N/A | 11.2-11.8 | 11.25-11.75 ⁽¹⁾ |
| Recommended ROE | | | | 12.00-12.25 ⁽²⁾ |

Notes:

1. Rounded
2. Dr. Waters' recommended ROE was 12.00-12.25 percent with emphasis on the lower end of this range. His final recommendation placed reliance on the Equity Risk Premium Test to which he added 50 basis points as a cushion to reflect prevailing financial conditions.

With respect to the comparable earnings test, in his original written evidence Trans Mountain's expert witness, after examining the historical rates of return earned by a sample of high-quality, low-risk unregulated companies, concluded that the prospective rate of return on book equity for such companies was in the range of 13.75 and 14.25 percent. The witness added that considering the comparative risks of Trans Mountain, it is reasonable to adopt the results of the comparable earnings test as a fair rate of return for Trans Mountain with an emphasis on the upper half of this range.

In his written evidence, the expert witness indicated that economic conditions, especially inflation experienced during the time period selected (1983-1990) for the purposes of the comparable earnings test, were similar to the conditions that exist today and are currently in prospect for the test year. However, in his supplementary evidence, both long-term inflation and long-term Government of Canada bond yield expectations were revised downward by more than one percent. While no revision was made to the results of his comparable earnings test, the witness did reduce the overall rate of return recommendation by 50 basis points, from an originally recommended range of 13.75-14.25 percent to the 13.25-13.75 range.

In his original filed evidence, Dr. Evans concluded, based on his DCF analysis, that the cost of equity capital for Trans Mountain was in the range of 13.75 to 14.25 percent. However, the witness acknowledged that the DCF test results with respect to the investors' growth expectations and actual growth performance were subject to fairly erratic trends and, under such circumstances DCF test results are far less useful and reliable.

With respect to the use of the equity risk premium approach, he originally concluded that the investors' required rate of return for Trans Mountain was in the range of 13.75 to 14.0 percent, assuming a long-term Canada bond yield in the range of 9.5 to 10.0 percent for the test year. However, in his supplementary evidence, the forecast long-term Government of Canada bonds yield was revised downward by 125 basis points to a range of 8.0 to 9.0 percent, while the results of the equity risk premium test were adjusted downward by only 50 basis points. The witness reconciled this variance in the adjustment to his results by stating that the risk premium increases as the interest rates fall.

In recommending a rate of return on common equity for Trans Mountain, Trans Mountain's expert witness gave more weight to the results of the comparable earnings test and equity risk premium method, as the DCF results were not reliable in his view. Had he given equal weight to the results of all three tests, the final recommendation would not have been meaningfully different as the results of all three tests were within a very close range. In making his final rate of return on common equity recommendation, the witness focused on the mid-point of his recommended range of 13.25 to 13.75 percent in recognition of the comparable risks between Trans Mountain and the high-quality, low-risk unregulated companies included in his sample.

In arriving at his final recommendation, the CPA/APMC expert witness did not use the comparable earnings approach because of concerns relating to the distorting effect of inflation and the possibility that the sample selection process might result in a bias towards firms which have the ability to consistently earn rates of return in excess of competitive rates.

In employing the DCF test, CPA/APMC's expert witness, Dr. Waters, concluded that the investors' required rate of return for his low-risk non-utility sample was no higher than 11.0 percent and, the comparable risks of pure utilities being lower than the non-utility companies included in his sample,

a downward adjustment of 60 to 80 basis points was necessary. Therefore, investors' required return on equity for pure utilities was in the range of 10.25 to 10.50 percent (rounded). The witness added that, in view of the currently unsettled conditions prevailing in the financial markets, it would be appropriate to give more weight to the results of the equity risk premium test, which reflects the current market conditions better than the DCF test. For the purposes of the equity risk premium test, the expert witness calculated total market risk premium to be in the range of 3.5 to 4.7 percent and the comparative risks of utility companies being no higher than one half of the total market, the equity risk premium for Trans Mountain was in the range of 1.8 to 2.4 percent. In arriving at investors' required rate of return on equity this witness utilized a long-term Canada bond rate of 9.4 percent for the test year, and this rate is 90 basis points higher than the mid-point of the long-Canada bond rate forecast of 8.0 to 9.0 percent utilized by the Company witness. In addition, the CPA/APMC witness added 50 basis points as a cushion.

Giving most weight to the results of the equity risk premium analysis, the CPA/APMC witness concluded that the investors' required rate of return for Trans Mountain was in the range of 12.0 to 12.25 percent. During the hearing, the witness indicated his preference for the lower end of this range.

As mentioned earlier, IPAC relied on the advice of its expert witness (Mr. Weir) to assess the appropriateness of the level of earnings experienced by Trans Mountain. During cross-examination the expert witness for IPAC took the view that the three tests used to arrive at a fair rate of return have lead the regulated utilities to earn excess returns. To arrive at this conclusion of "excess returns" this witness relied on the returns experienced by the companies included in a Statistics Canada publication. During cross-examination this witness agreed that the risk profile of the companies included in this publication is not comparable to Trans Mountain. The expert witness for CPA/APMC during cross-examination was of the view that the returns experienced by the companies included in the Statistics Canada publication should not be used to determine rate of return for Trans Mountain, as these companies are not of comparable risk to Trans Mountain.

During the hearing, IPAC proposed a simplified rate of return setting mechanism for the regulated utilities. Under the proposed mechanism the Board would determine an equity risk premium for each utility under its jurisdiction each year. The pre-determined risk premium would then be added to a forecast long-term Canada bond rate to arrive at a fair rate of return on common equity for the test year. If the actual long-term Canada bond rate stays within a certain tolerance range during the test year no adjustment to the allowed ROE would be warranted. However, if the long Canada yields move outside the tolerance range, adjustments to the allowed rate of return might be necessary. Neither the Company nor any intervenor took issue with this proposal, for or against.

In final argument, the CPA submitted that Trans Mountain's requested rate of return on common equity was not consistent with the prevailing economic environment and actual developments in the capital markets such as current and forecast lower level of inflation and interest rates since the Company's last toll hearing.

During cross-examination and in argument IPAC pointed out that excessive reliance on the subjective results of the three tests widely used by regulatory bodies fails to provide any check on reality. In argument, IPAC submitted that in the current economic environment, a rate of return on common equity for Trans Mountain within the range of 11.5 to 12.0 percent, with emphasis on the lower end of the range, would be appropriate.

The issue of flotation allowance was discussed during the hearing. During cross-examination IPAC argued that if a company could raise financing through low-cost means such as a rights offering, a flotation allowance of 110-120 percent as recommended by Trans Mountain's expert witness should not be allowed. Secondly, if a company is not planning on raising equity financing in the foreseeable future, IPAC questioned the need for flotation allowance. Trans Mountain's expert witness disagreed with IPAC's views on this issue. During cross-examination, the expert witness for IPAC took the view that flotation allowance should be factored into the fair rate of return at all times, however, he disagreed with the magnitude of the flotation allowance being recommended by Trans Mountain's expert witness.

Views of the Board

The determination of a fair rate of return on common equity involves a high degree of subjective judgment. In addition, because of the Company's diversified activities, which include non-regulated business operations, an imputed capital structure for pipeline assets is employed for regulatory purposes. Therefore, there is no empirical market data which the Board can evaluate with respect to Trans Mountain's regulated utility operations. In reaching its decision, the Board must rely on a variety of methodologies, each purporting to simulate the fair return required by a typical investor in the equity of a pure utility.

The variety of methods employed by various experts and the range of their recommendations attest to the complexities of this undertaking. Nevertheless, the Board considers all of the input received on this issue to be helpful in reaching its finding. The Board notes IPAC's views on the weaknesses of the tests commonly used by expert witnesses and recognizes some merit in the proposal for a simplified rate of return setting mechanism put forward by IPAC. However, this approach may have its own limitations as well. While the Board is not willing to adopt this approach at this time, this does not mean that the use of this approach or any other alternative approach to rate making for the regulated utilities should not be explored. Until such time as the new approaches to rate making for the regulated utilities are explored, and their strengths and weaknesses are evaluated, the Board will continue to use the results of these three tests.

In considering the positions of the various parties, the Board notes that there were considerable differences of opinion among the expert witnesses regarding the comparable earnings test. While the Company's witness put considerable weight on the results of this test, the CPA/APMC witness did not use this test. The CPA/APMC witness stated that the existence of higher than current rates of inflation in the early part of the current business cycle will distort the achieved rates of return over this cycle.

The Board is of the view that significant changes in rates of inflation can seriously distort the results of the comparable earnings test. In addition, the extensive reliance on the results of partial business cycles is questionable. For these reasons, the Board has placed less reliance on the results of the comparable earnings test in this proceeding.

The Board notes that the dividend component results of the DCF test concluded by the expert witnesses for the Company and for CPA/APMC were very similar, based on the companies included in their respective samples. However, the growth component results were materially different. The Company witness acknowledged that his analysis of the data did not indicate any reliable expected growth pattern; accordingly, the DCF results are far less useful and reliable than the other two tests used. The DCF test

results for pure utilities arrived at by the CPA/APMC witness were in the range of 10.25 to 10.50 percent. He also indicated that, in view of the unsettled conditions currently prevailing in the financial markets, it would be appropriate to give greater weight to the results of the equity risk premium test. In view of the above, the Board has taken into account the inherent weaknesses of the DCF test results in arriving at its final decision.

Under the equity risk premium methodology, the witness for Trans Mountain used a range of 8.0 to 9.0 percent for the long-term Canada rate for the test year, while the CPA/APMC witness used a rate of 9.4 percent. Based on the results of various risk premium studies included in his direct evidence, Trans Mountain's witness estimated the risk premium for Trans Mountain to be in the range of 3.0 to 3.5 percent with the focus on 3.25 percent. The total equity market risk premium concluded by the CPA/APMC's witness was in the range of 3.5 to 4.7 percent and, in the view of this witness, the risks of Trans Mountain's utility operation were no higher than one-half the total market. In his view, the equity risk premium for Trans Mountain was in the range of 1.8 to 2.4 percent. Having reviewed the evidence presented with respect to the total equity market risk premium, the Board is not persuaded that the total equity market risk premium at the present time is as high as suggested by Trans Mountain's expert witness. In addition, the Board is of the view that the risks faced by Trans Mountain's utility operations at the present time are significantly less than the typical industrial company, but lie somewhere above the level implied by the CPA/APMC witness who used a beta factor of 0.5.

The Board agrees that a premium is necessary to raise the "bare-bones" return so that Trans Mountain can attract new equity without dilution to existing equity. However, the Board does not believe the adjustment should also reflect the high market-to-book ratios currently being experienced by high-grade industrials in the unregulated sector.

Decision

Having weighed all of the evidence, and giving particular consideration to the decline in inflation levels since the Company's last toll hearing, the current interest rate level and the prospects for inflation and interest rates in the test year, the Board finds 12.50 percent to be a fair rate of return on common equity for Trans Mountain.

8.3 Rate of Return on Rate Base

Decision

Based on its findings in this case, the Board approves the capitalization and rate of return on rate base of 11.47 percent as shown in Table 8-4.

Table 8-4

**APPROVED DEEMED CAPITAL STRUCTURE AND
RATES OF RETURN FOR THE TEST YEAR**

| | Amount (\$000) | Capital Structure (%) | Cost Rate (%) | Cost Component (%) |
|-----------------------------|-------------------|-----------------------------|------------------|--------------------------|
| Debt - Funded | 84,897 | 50.00 | 10.57 | 5.29 |
| - Unfunded | 4,245 | 2.50 | 9.50 | 0.24 |
| Common Equity | <u>80,653</u> | <u>47.50</u> | 12.50 | <u>5.94</u> |
| Total Capitalization | <u>169,795</u> | <u>100.00</u> | | |
| Rate of Return on Rate Base | | | | <u>11.47</u> |

8.4 Procedure For Adjustments to the Allowed Cost of Debt

The appropriateness of changing the allowed cost of debt in the context of a Class 2 Toll Application is discussed on pages 14-17 of the Board's Reasons For Decision T0-8-90. In that decision, the Board indicated the issue would be revisited in Trans Mountain's next Class 3 Toll Application and was made an issue in the current review.

Trans Mountain stated that the Rate of Return Task Force reached a consensus on this issue. The parties agreed that the debt costs should only be changed in the context of a Class 3 Toll Application as some approximations may have to be used in arriving at the return when growth or refinancing requirements have not been funded long-term. No intervenor took issue with this matter.

The Board agrees that changes to the cost of debt for rate-making purposes is an issue which can best be addressed in the context of a Class 3 Toll Application; however, there may be situations in which adjusting the cost of debt in the context of a Class 2 Toll Application may be appropriate.

Decision

Unless otherwise directed by the Board on a specific case basis, adjustments to the allowed cost of debt will be made only in the context of a Class 3 Toll Application.

Toll Design and Tariff Matters

9.1 Toll Trigger Mechanism

Trans Mountain is required to file an application for new tolls whenever it is apparent that its transportation revenue will exceed the approved revenue requirement by four percent or more. For other Group 1 Companies subject to the prescribed toll adjustment procedures, this requirement is triggered whenever there is a two percent variation in the actual versus the approved rate of return on common equity. Pursuant to its 1990 review of the toll adjustment procedures, the Board indicated its intention to review the toll trigger mechanism for Trans Mountain at the next toll hearing.

In its application, Trans Mountain reported that such a review had been undertaken by a task force composed of interested parties and that it had been resolved that the current toll trigger mechanism continues to be the best available for Trans Mountain. The Company also indicated that it would circulate its quarterly surveillance reports directly to any interested party upon request. Trans Mountain argued for continuation of the revenue trigger. It pointed to the Company's performance over the past few years as proof that the current system is working. Throughput and revenue forecasts are now prepared monthly. Trans Mountain asserted that it would require additional staff to provide comparable monitoring of its ROE. It contended that a ROE trigger would provide no greater stability of earnings while at the same time it would precipitate more complex and costly toll adjustment applications which would inevitably result in increased regulatory lag and longer periods under interim tolls.

Although IPAC acknowledged that as a participant on the task force it had supported maintenance of the existing trigger mechanism, after viewing the complete application, IPAC reconsidered this view and concluded that the toll trigger mechanism should be based upon a variation in the ROE. It was concerned that because a revenue trigger did not incorporate cost savings achieved by the Company, it was inconsistent with the implementation of a cost control program which would benefit shippers. IPAC maintained that a revenue based mechanism placed the onus on the toll-payer or regulator rather than on Trans Mountain to improve performance. IPAC's concern was related to the fact that Trans Mountain had achieved higher than approved earnings in 1991 partly as a result of capitalizing greater than forecast amounts for salaries and wages. In the context of incentive regulation, IPAC further suggested that a greater than two percentage point trigger threshold might be appropriate provided the Board approved a significant reduction in the ROE. Allowing a greater amount of positive variation in the ROE could operate as an incentive for Trans Mountain to improve performance. IPAC noted that the Company's expert witness acknowledged that a change to a ROE trigger would not affect either the Company's ability to earn its allowed ROE or its perceived riskiness. IPAC contended that Trans Mountain was overstating the difficulty involved and cited the experience of other Group 1 Companies. It found that the current system, by allowing Trans Mountain to over-earn was more costly for shippers.

APMC, while not taking a position contrary to the task force recommendation, indicated that the Board should not be fettered by the task force recommendation when reviewing the appropriateness of the revenue trigger. No other intervenors commented on this issue.

Views of the Board

The fact that Trans Mountain has a revenue trigger, rather than a ROE trigger is largely the result of historical circumstances rather than current necessity. In January 1978, Trans Mountain was the first company to have a toll trigger prescribed by the Board. At that time, Trans Mountain had a much smaller rate base with proportionately larger variations in throughput. Initially the trigger was set at a five percent variation in throughput to equate to a 1.6 percent variation in the ROE. This was later refined to a four percent variation in revenue. Trans Mountain acknowledged that a four percentage variation in transportation revenue is now equivalent to two percent for ROE.

The Board is concerned that the current revenue trigger allows Trans Mountain to exceed its approved ROE by a significant margin without triggering the need for a toll adjustment. Such was the case in 1991. Although Trans Mountain has indicated that monitoring its ROE would require more staff, the Board considers monitoring earnings performance to be a normal management function which should not require additional resources. Moreover, no additional reporting is required. In the circumstances, the Board can find no compelling reason to maintain a revenue trigger for Trans Mountain and is of the view that the ROE trigger is more appropriate.

Decision

The Board has decided that, in the future, Trans Mountain is required to file an application for new tolls as soon as it is apparent that the Company will exceed the allowed ROE by more than two percentage points. For greater clarity, the Company shall compare its forecast net income for the year, expressed as a percentage of the approved equity component of its updated actual rate base, to the ROE approved by the Board at the most recent toll hearing. The application shall contain tolls based on projections of the revenue requirement and throughput for the full calendar year, in the same manner that tolls that are calculated for a full forward test year. Board Order TO-8-90 has been revoked and replaced by Board Order TO-3-92 to reflect this change.

9.2 Throughput Forecasting Methodology

Pursuant to a request from IPAC dated 13 December 1991, the Board decided to amend the list of issues for the oral portion of the hearing to include a review of the adequacy of the existing throughput methodology employed by Trans Mountain and an examination of alternatives.

The applicant's current throughput forecast methodology is based primarily on a 13-month throughput forecast received from its shippers. This forecast is updated and submitted to the Board on a monthly basis throughout the year.

IPAC was the only intervenor to question Trans Mountain's throughput forecast methodology. It stated that Trans Mountain has had an extremely difficult time projecting the level of exports which it will experience in any given test year. IPAC proposed in its written evidence that at the beginning of each test year, the NEB establish tolls based on Trans Mountain's forecast of exports. To the extent that actual volumes vary from projected, either positive or negative, the resultant overearnings or shortfall would be recorded in a deferral account to be accounted-for in future tolls.

Trans Mountain opposed the use of a deferral account. The Company pointed to the fact that over the period 1985 to 1991 cumulative actual revenues had varied by only \$601,000 from the total of allowed amounts of \$406,773,000, as evidence that its forecasting of throughputs had been accurate over time. The Company testified that the majority of its shippers supported the current methodology.

APMC indicated that it would prefer not to have a deferral account and that only if the Board was satisfied that export shipments could not be forecast reasonably would a deferral account be warranted. If such an account were established and forecasting export shipment became predictable, APMC recommended that the deferral account be discontinued at that time.

Gulf expressed support for the position of the majority of the task force that the existing methodology is the best available. Shell stated that it did not object to the continuation of the existing methodology.

Views of The Board

Although significant variances can occur in individual years, the Board accepts Trans Mountain's evidence that, over time, its throughput forecasts have been reasonably accurate. In addition, the Board notes and gives weight to the fact that the current methodology appears to have the continuing support of most parties. To ensure that the current methodology adequately serves the interests of shippers, the Board will continue to monitor the accuracy of the Company's throughput forecasts.

Decision

The Board has decided that no change is required in Trans Mountain's throughput forecasting methodology at this time.

9.3 Toll Design for MTBE Facilities

Trans Mountain is planning to construct certain additional facilities for the transportation of Methyl Tertiary Butyl Ether (MTBE) from Edmonton to Burnaby starting in early 1993. Trans Mountain is proposing that approximately 61% of the \$6.5 million cost of these facilities be rolled into the system rate base and the balance be tolled separately on a stand alone basis to Chevron Canada Limited (Chevron), the MTBE shipper.

The facilities fall into the following categories:

- MTBE feeder pipeline at Edmonton terminal;
- Metering facilities and pipeline to tank manifold at Edmonton;
- Buffer tanks at Edmonton and Burnaby;
- Upgrade of tanks at Edmonton and Burnaby; and
- Piping and valve modifications at Kamloops, Hope and Sumas.

Trans Mountain would charge a separate add-on toll for the Edmonton feeder pipeline and the buffer storage tanks. All parties accepted this proposal. Chevron has guaranteed the recovery of the full cost of these facilities whether or not it continues to use them, but requested that the Board provide guidance concerning the circumstances for a future sharing of these costs.

The areas of controversy concern the facilities which Trans Mountain wishes to include in the common rate base. These are: two meters and the pipeline and the related pipeline to connect them to the manifold

of the storage tank at Edmonton; modifications to storage tanks at Edmonton and Burnaby; and pipeline and valve modifications at Kamloops, Hope and Sumas. The costs of these facilities would thus be shared by other system users. Trans Mountain contends that its proposal is consistent with its treatment of costs for shippers of similar hydrocarbon products and that the shared costs are associated with the provision of a basic level of service. Trans Mountain pointed out that many of the required modifications are scheduled replacements which are being performed at little or no additional cost.

CPA accepted the rolling-in of costs for mainline facilities and some tankage. It considered the concept of basic transportation service as hazy and characterized the costs of new meters and modification of existing tankage at Edmonton and Burnaby as gray areas. CPA noted that these changes are required exclusively for MTBE service. It urged the Board to examine such costs critically and to exercise its discretion to alter any inappropriate allocation of costs. While CPA did not support Trans Mountain's tolling proposal, neither did it oppose it.

IPAC challenged the rolling-in of costs for basic service. In its view, the existing toll methodology was wrong and should not be used to justify the derivation of tolls for MTBE. IPAC took issue with the rolling-in of costs for meters and the pipeline to the Edmonton storage tank because these facilities are clearly dedicated to MTBE use and there was no reasonable expectation that they would be used by any other shipper. IPAC further questioned the treatment of costs for storage tank upgrading and pipe and valve modifications. It felt that, since these costs are being incurred for MTBE service, they should be the sole responsibility of the MTBE shipper.

Chevron supported the proposed toll design. It noted that MTBE will be using available surplus capacity and that all shippers will benefit since the incremental cost of transporting MTBE is less than the expected toll. Chevron asserted that MTBE is similar to products handled by Trans Mountain since 1985 and the proposed toll treatment is identical. Modifications to tankage are consistent with earlier improvements in the system. Moreover, these storage tanks remain available for alternate use. The proposed pipe modifications will reduce contamination for all shippers, not just Chevron. Finally, the required valve modifications are being performed at no additional cost as part of Trans Mountain's regular maintenance program.

APMC expressed concern that shippers will be backstopping the cost of the rolled-in facilities. It characterized the transportation of MTBE as being associated with uncertainty and requested that the Board only allow Trans Mountain to roll-in costs for facilities where there is a reasonable expectation, rather than just a possibility, that these facilities will be used by others. APMC asserted that since the two meters and the pipeline from them to the storage tank at Edmonton will not be connected to allow their use by other shippers, their costs should be tolled separately. Similarly, since the tank modifications, particularly the MTBE-compatible floor and wall coating, are only required for MTBE shipments, these costs should be added to those of the dedicated facilities. APMC was also concerned that an appropriate amount of project overhead be allocated to the dedicated facilities.

Views of the Board

In debate on this issue a number of parties cited the principles set out in previous decisions by the Board, particularly the RH-3-90 decision on IPL's Natural Gas Liquids (NGL) storage facilities in Edmonton. In the RH-3-90 decision, the Board reiterated certain fundamental principles from the RH-4-86 decision with respect to the determination of just and reasonable tolls. These principles require that tolls be as cost-based as practical, recognizing the concept of user-pay with no unjust discrimination. The result, in

that case, was the Board's decision that the proposed NGL facilities should be tolled on a stand-alone basis. The Board found that those facilities, as well as having materially different costs, met only the specific requirements of NGL and were incompatible with other uses. On this last point, the Board's view was that an important distinction should be made between facilities which are dedicated to one shipper or one commodity group and facilities which serve, or can reasonably be expected to serve, many shippers or commodity groups.

In an earlier decision, OH-1-87, the Board dealt with similar issues in deciding the appropriate tolling for special stream facilities on Trans Mountain. The Board decided that the capital and operating costs of facilities on the Trans Mountain system should be rolled into the common rate base and basic service cost pool, if the facilities are of a level and nature required to provide basic transportation service for a multi-stream pipeline system. The fact that Trans Mountain handles a variety of hydrocarbon streams through a single mainline was a key factor that the Board considered in assessing the appropriate treatment for the special stream facilities. It is also an important characteristic that distinguishes Trans Mountain's operations from those of IPL.

The Board found that certain modifications intended to accommodate special streams, such as the removal of dead legs, would actually enhance the overall efficiency of the system and, therefore, should be rolled into the basic transportation rate and cost of service. Conversely, other facilities, such as those for quality control, were found to be unique and beyond the basic service provided to other users. The Board decided that the costs associated with these unique facilities would be tolled separately even though those costs were relatively modest.

In the present case, the Board has applied a similar approach in determining the appropriate tolling treatment to be given to the various facilities proposed to accommodate the MTBE service. There was no disagreement with the proposal to give separate toll treatment to the Edmonton feeder pipeline and the buffer storage tanks at Edmonton and Burnaby and the Board agrees that, given the dedicated nature of these facilities, they should be tolled on a stand-alone basis. Similarly, the Board finds that the special MTBE-compatible coating material for tank bottoms and sides, estimated to cost \$28,000 extra per tank, are MTBE-specific modifications that are unique and therefore should be charged only to MTBE shippers. If, in the future, Trans Mountain is able to demonstrate that these facilities could be reasonably expected to be put to alternate or joint use, then the Board would review the stand-alone toll treatment.

With respect to costs of the other proposed facilities that Trans Mountain wishes to roll into the basic transportation rate, the Board finds these facilities are of a level and nature consistent with the provision of basic transportation service and, therefore, the associated costs should be tolled on a rolled-in basis. These facilities include:

- 1) **the two meters and pipeline to the manifold at the storage tanks at Edmonton.** The Board considers these facilities to be part of the basic service provided by Trans Mountain as they are comparable to facilities provided to other hydrocarbon streams;
- 2) **modifications, other than the special coatings referred to earlier, to storage tanks No. 19 at Edmonton and No. 86 at Burnaby.** In particular, the Board finds that the installation of new floating roofs on existing tankage is an environmentally responsible measure in the circumstance regardless of what product will be stored therein. The Board notes that similar roofs have already been installed on tanks used for other service and the tanks used for MTBE may be switched to other service; and

- 3) **pipeline and valve modifications at Kamloops, Hope and Sumas.** Although these modifications could be classified as gray areas, since they are required for MTBE service, overall, the Board is satisfied that they are within the ambit of basic service on Trans Mountain's multi-stream pipeline system. Furthermore, all shippers will benefit from the removal of dead legs from the system. In addition, the Board gives weight to the fact that the valve modifications will be implemented as scheduled replacements at little or no additional cost.

The proposal to include the costs of most of the new MTBE facilities into the basic transportation toll raised concerns about the risk of the new facilities being underutilized in the future. Balanced against this risk is the expectation that increased throughput, as a result of the MTBE shipments, will lower tolls and benefit all other shippers. In this instance the Board notes that Chevron has guaranteed the costs of nearly one-third of the required facilities. Although this guarantee only covers the dedicated facilities and does not ensure minimum throughput, the magnitude of the investment in the MTBE plant provides a strong indication of Chevron's intention to use the Trans Mountain pipeline. As a result, the Board is satisfied that the risk associated with the rolled-in tolling treatment of the previously-identified facilities is acceptable.

Decision

With the exception of the additional charge to the MTBE shipper for the special coating material for tank bottoms and sides, the Board accepts Trans Mountain's proposed toll methodology for MTBE service. The Board directs Trans Mountain to allocate an appropriate amount of overhead to the separate facilities.

9.4 Heavy Crude Surcharge Methodology

In response to a directive from the Board, Trans Mountain's Cost of Service Task Force reviewed the continued appropriateness of Trans Mountain's 20% surcharge on heavy crude oil. Heavy crude is petroleum with a density greater than 904 kilograms per cubic metre at 15 degrees celsius. The task force resolved that the current heavy crude surcharge methodology is appropriate for Trans Mountain and should remain at its current level. No party raised this matter during the hearing process.

Decision

The Board is satisfied that the current surcharge remains appropriate. The Board notes that shipments of heavy crude have diminished in recent years. If this situation changes, the Board may wish to revisit the surcharge issue.

9.5 Edmonton Pipe Racks

IPAC was concerned that shippers were backstopping Trans Mountain's investment in pipe racks at the Edmonton terminal. Trans Mountain had installed the pipe racks to facilitate traversal of its property by foreign pipelines. Recovery of the cost of these racks is guaranteed by special service agreements with the users, Petro-Canada Inc. and Alberta Envirofuels Inc.. IPAC indicated that inclusion of the pipe racks in rate base exposes shippers to unwarranted risk and requested that the Board exclude the cost of these facilities from rate base. No other party addressed this issue.

Decision

The Board is satisfied with the arrangements that Trans Mountain has made to recover the cost of pipe racks from users. Therefore, the Board has decided not to make any special provision for the cost of these items at this time.

9.6 Tankage Credits

IPAC was concerned that the tankage requirements of individual shippers and commodities varied considerably and that tolls did not reflect this fact. It was concerned that shippers were being charged even when they did not require the same basic service. IPAC wished volumetric charges to be refined on the basis of several cost specific parameters such as average residence time, fill and discharge frequency and special storage tank requirements. It ultimately urged a complete study of cost causality and toll design.

Trans Mountain indicated that this issue was fully explored during a negotiated settlement process in 1990 in which IPAC participated. The results of that consensus were reflected in the Board's decision on the 1990 Class 2 toll application which resulted in the awarding of tankage credits to non-users. Tankage costs are now allocated between receipt, transmission and delivery functions and charges are assessed according to whether a shipper makes use of the tankage associated with each particular function.

Views of the Board

There must be operational limits to the complexity of any toll design methodology. At some point, the value of the extra precision achieved in measuring cost differentials does not justify the expense of the refinement. In this respect, the Board notes that the tankage function currently represents approximately 20% of Trans Mountain's cost of service and that Trans Mountain has recently implemented a system of tankage credits and charges to recognize differences in usage.

Decision

The Board is satisfied that the current system of tankage credits and charges results in the determination of just and reasonable tolls. No change is required at this time.

9.7 Need For Toll Design Study

During this hearing, IPAC emphasized the need for a complete study of Trans Mountain's toll design. It maintained that Trans Mountain's tolls should be as cost-based as possible. It called for a strict functionalization of costs and tolls for each commodity group reflecting cost-causality. IPAC asked the Board to require Trans Mountain to undertake any necessary toll studies to ascertain these tolls.

Decision

While the Board acknowledges that there may be merit in revisiting Trans Mountain's toll design at a future date, the Board is not convinced that it is appropriate at this time. The Board sees no need for a detailed toll design study as suggested by IPAC, as it is satisfied that Trans Mountain's toll design is as cost-based as is practical.

9.8 Throughput Forecast

Trans Mountain initially submitted a throughput forecast of 28 720 m³ per day for the 1992 test year. Prior to the commencement of the oral portion of the hearing, Trans Mountain provided a revised forecast of 28 990 m³ per day, an increase of 270 m³ per day. However, in its monthly throughput forecast submitted to the Board by letter dated 23 April 1992, Trans Mountain forecasted 1992 deliveries equal to 29,823 m³ per day, an increase of 833 m³ per day from the revised forecast.

The latest forecast according to Trans Mountain, reflects changes in the export markets as a result of low prices and weak demand for Canadian crude in the midwestern United States resulting in shippers seeking alternate markets. In addition, Trans Mountain indicated that exports to Washington State and offshore will continue at moderately high levels.

Decision

The Board concurs with Trans Mountain that Canadian sellers are attempting to diversify their outlets, particularly for light crude oil. Therefore, the Board has increased Trans Mountain's revised forecast of 28 990 m³ per day to 29 823 m³ per day which equals its forecast as provided in the letter dated 23 April 1992. The Board also approves the breakdown of deliveries as set out in this letter.

Table 9-1 provides a comparison of the Company's forecast test-year deliveries per the application to the forecast approved in this Decision.

Table 9-1
1992 TEST YEAR DELIVERIES
(m³ per day)

| <u>From</u> | <u>To</u> | <u>Type</u> | <u>Application</u> | <u>Approved</u> |
|-------------------|-----------|--------------|--------------------|-----------------|
| Edmonton | Kamloops | Refined | 2 860 | 2 713 |
| | Sumas | Light | 890 | 1 425 |
| | Burnaby | Light | 16 180 | 16 868 |
| | Burnaby | Heavy | 790 | 707 |
| | Burnaby | Shell | 2 460 | 2 317 |
| | Burnaby | Petro-Canada | 160 | 160 |
| | Burnaby | Imperial | 610 | 574 |
| | Burnaby | Butane | 150 | 147 |
| | Burnaby | Light | 440 | 462 |
| Edson | Burnaby | Light | 440 | 462 |
| Kamloops | Sumas | Light | 90 | 90 |
| | Burnaby | Light | 4 360 | 4 360 |
| Total | | | <u>28 990</u> | <u>29 823</u> |
| Edson Gathering | | | 140 | 140 |
| Westridge Loading | | | 2 970 | 3 237 |

9.9 Tolls

Based upon adjustments to Trans Mountain's applied-for revenue requirement and throughput forecast, the Board has calculated final tolls for Trans Mountain. These are compared to the previous tolls and those initially applied-for in Table 9-2,. On a weighted average basis, the new tolls are 2.7 percent lower than those previously approved.

Trans Mountain has been charging its applied-for tolls on an interim basis since 1 January 1992. Because these tolls are higher than those finally approved by the Board, Trans Mountain is required to adjust its previous billings during the interim period and to refund the difference to shippers with interest in the billing for the month of June 1992. Interest should be computed at an annual rate of 9.5% for the interim period, this being the rate approved by the Board for unfunded debt.

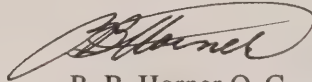
Table 9-2
TOLL COMPARISON
(\$ per m³)

| <u>Origin</u> | <u>Destination</u> | <u>Type</u> | <u>Existing</u> | <u>Applied-for</u> | <u>Approved</u> |
|-------------------|--------------------|--------------|-----------------|--------------------|-----------------|
| Edmonton | Kamloops | Refined | 5.790 | 6.062 | 5.647 |
| | Sumas | Light | 6.256 | 8.222 | 7.636 |
| | Burnaby | Light | 9.045 | 9.531 | 8.860 |
| | Burnaby | Heavy | 10.854 | 11.437 | 10.631 |
| | Burnaby | Shell | 8.232 | 8.732 | 8.133 |
| | Burnaby | Petro-Canada | 9.032 | 9.510 | 8.839 |
| | Burnaby | Imperial | 8.359 | 8.761 | 8.156 |
| | Burnaby | Butane | 7.883 | 8.320 | 7.786 |
| Edson | Burnaby | Light | 7.806 | 8.191 | 7.602 |
| Kamloops | Sumas | Light | 3.238 | 3.383 | 2.412 |
| | Burnaby | Light | 4.576 | 4.698 | 3.642 |
| Edson Gathering | | | 0.540 | 0.479 | 0.390 |
| Westridge Loading | | | 0.251 | 0.251 | 0.251 |

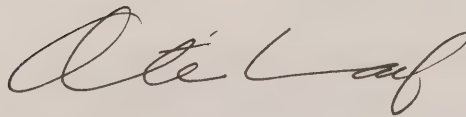
Chapter 10

Disposition

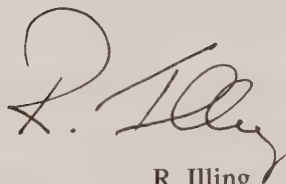
The foregoing chapters, together with Orders Number TO-2-92 and TO-3-92, constitute our Decision and Reasons for Decision in this matter.



R. B. Horner Q. C.
Presiding Member



A. Côté-Verhaaf
Member



R. Illing
Member

Appendix I

ORDER TO-2-92

IN THE MATTER OF the *National Energy Board Act* ("the Act")
and the regulations made thereunder; and

IN THE MATTER OF an application by Trans Mountain Pipe
Line Company Ltd. ("Trans Mountain") for certain orders under
sections 19, 59 and 64 of the Act, filed with the Board under
File No. 4200-T004-3.

B E F O R E the Board on 10 June 1992.

WHEREAS on 6 September 1991 Trans Mountain filed with the Board a Class 3
application for new tolls for 1992;

AND WHEREAS Trans Mountain on 6 September 1991 also applied under sections
19(2) and 64 of the Act for an order making the applied for tolls interim tolls effective 1 January
1992, in the event the Board was not able to render its decision by 1 January 1992;

AND WHEREAS the Board on 4 December 1991 issued Order TOI-3-91, as amended by
Board Order AO-1-TOI-3-91, making the applied for tolls interim tolls effective 1 January 1992,
pending its review of Trans Mountain's Class 3 application;

AND WHEREAS a part written and part oral hearing was held pursuant to Hearing
Order RH-3-91 to consider Trans Mountains's application;

AND WHEREAS the Board has considered Trans Mountain's application, and the
evidence and arguments of interested parties who appeared at the oral hearing or who filed a
written submission.

IT IS ORDERED THAT:

1. Subject to paragraph 2, Trans Mountain shall charge the tolls prescribed in Schedule "A"
attached hereto, effective 1 July 1992.
2. Trans Mountain shall recalculate its billings to shippers for the period, 1 January 1992 to
30 June 1992 and refund to shippers, in billings for the month of June 1992, with interest

at an annual rate of 9.5 percent, the amount by which amounts previously billed based on the tolls prescribed in Order AO-1-TOI-3-91 exceed the amounts that would have been charged if the tolls prescribed in Schedule "A" hereto had been in effect.

3. The Company shall forthwith file with the Board a tariff conforming to this Order and serve it upon:
 - (a) the Company's shippers; and
 - (b) All registered intervenors in the RH-3-91 procedure.
4. Board Order TOI-3-91 as amended by AO-1-TOI-3-91 is rescinded effective at the end of 30 June 1992.

NATIONAL ENERGY BOARD

J. S. Richardson
Secretary

Schedule "A"

Tolls To Be Charged Effective 1 July 1992

Petroleum with a density less than 904 kilograms
per cubic metre at 15 degrees Celsius:

| <u>From</u> | <u>To</u> | <u>Toll per Cubic Metre</u> |
|-------------|-----------|-----------------------------|
| Edmonton | Sumas* | \$7.636 |
| Edmonton | Burnaby | \$8.860 |
| Edson | Sumas* | \$6.372 |
| Edson | Burnaby | \$7.602 |
| Kamloops | Sumas* | \$2.412 |
| Kamloops | Burnaby | \$3.642 |

Heavy Petroleum with a density greater than 904 kilograms
per cubic metre at 15 degrees Celsius:

| | | |
|----------|---------|----------|
| Edmonton | Burnaby | \$10.631 |
|----------|---------|----------|

Butane:

| | | |
|----------|---------|---------|
| Edmonton | Burnaby | \$7.786 |
|----------|---------|---------|

Edson Gathering Charge: \$0.390

Westridge Loading Charge: \$0.251

Refined and Partially Refined Petroleum Charges:

1. Toll per Cubic Metre

| | <u>From</u> | <u>To</u> | |
|-----------------------------|-------------|-----------|---------|
| Refined Petroleum | Edmonton | Kamloops | \$5.647 |
| Shell Special Stream | Edmonton | Burnaby | \$8.133 |
| Petro-Canada Special Stream | Edmonton | Burnaby | \$8.839 |
| Imperial Special Stream | Edmonton | Burnaby | \$8.156 |

2. Monthly Facilities Charges

| | |
|----------------------|----------|
| Shell Canada Limited | \$8,352 |
| Petro-Canada Inc. | \$18,844 |
| Imperial Oil Limited | \$15,377 |

* a point on the international boundary near Sumas, British Columbia where the pipeline connects to Trans Mountain Oil Pipe Line Corporation, a subsidiary pipeline in the State of Washington.

Appendix II

ORDER TO-3-92

IN THE MATTER OF the *National Energy Board Act* ("the Act")
and the regulations made thereunder; and

IN THE MATTER OF the procedure to be followed by Trans
Mountain Pipe Line Company Ltd. ("TMPL") for making
application to the Board for adjustment of tolls and tariffs
(Board File 4200-T004-3).

B E F O R E the Board on 10 June 1992.

WHEREAS the Board issued Order T0-8-90 Dated 13 December 1990, in respect of toll
application procedures which apply to TMPL;

AND WHEREAS the Board has reviewed the continued appropriateness of certain
procedures established by the said Order, during a hearing held pursuant to Order RH-3-91.

AND WHEREAS the Board is of the view that certain alterations to the procedures are
warranted;

IT IS ORDERED THAT:

1. The toll application procedures established by this Order shall apply to TMPL.
2. New tolls shall be based on the cost of service for the calendar year in which the tolls are
to be in effect.
3. There shall be three classes of applications for toll adjustments. Unless otherwise
authorized by the Board, Class 1 and 2 applications will not require a formal oral hearing
but Class 3 application will require such a hearing.
 - (a) CLASS 1 -
This class of application permits adjustments to the tolls which are required
because of significant changes in throughput and specific throughput-related costs
from those approved in the most recent Board Decision.

(b) CLASS 2 -

This class of application permits adjustments to the revenue requirement and tolls which are required because of any significant changes in the cost of service from that approved in the most recent Board Decision, with the exception of those changes identified as requiring Class 3 applications.

(c) CLASS 3 -

This class of application is required when the company is applying to change any of the following:

- (i) the rate of return on rate base authorized by the Board;
- (ii) the method of calculation of the allowance for income taxes; and
- (iii) the policies or principles approved by the Board at any previous hearing.

4. (a) Applications for adjustment in tolls or tariffs shall be made to the Board as follows:

CLASS 1 -

By filing with the Board twenty (20) copies of revised tariffs and supporting data as prescribed in paragraph 6 of this Order and serving interested parties as prescribed in paragraph 7. Applications are to be filed not later than fifty (50) days prior to the date on which the revised tolls are to be effective.

CLASS 2 -

By filing with the Board twenty (20) copies of revised tariffs and supporting data as prescribed in paragraph 6 of this Order and serving interested parties as prescribed in paragraph 7. Applications are to be filed not later than one hundred and five (105) days prior to the date on which the revised tolls are to be effective.

CLASS 3 -

By application for a toll hearing, supported by the information required by the schedule to the draft *NEB Rules of Practice and Procedure*.

- (b) Unless otherwise authorized by the Board, twenty (20) copies of a new or special tariff shall be filed with the Board, and one copy served on each party identified in the most recent interested party list pursuant to paragraph 8, not later than (60) days prior to the date on which such a tariff is to be effective.

5. An application for new tolls shall be made when it is forecast that the rate of return on equity in the calendar year will exceed that approved by the Board at the most recent toll hearing by more than two percentage points. The application shall contain tolls based on projections of the revenue requirement and throughput for the full calendar year, in the same manner as tolls that are calculated for a full forward test year. When approved, tolls so calculated shall apply for the remainder of that year or until revised by the Board.

6. When filing revised tariffs as a Class 1 or Class 2 toll application, the company shall provide supporting information in sufficient detail to enable the reasonableness of the

estimates to be established. The supporting information shall include the following:

For Class 1:

- (a) throughput by quarter showing source, destination, type of crude oil or product, and volume;
- (b) adjustments to specific throughput-related costs; for example fuel and power, caused by changes in throughput; and
- (c) explanations for all variances from the previously-approved figures.

For Class 2:

information identified under Class 1, plus

- (d) transportation, maintenance and general expenses by category of expense including explanations and justification for all variances from the previously-approved figures;
- (e) average rate base for the calendar year with explanations for all changes from the previously-approved figures;
- (f) depreciation and amortization expense and a reconciliation with rate base; and
- (g) a summary of the total revenue requirement.

The information identified above shall be provided in columnar form, showing amounts authorized by the Board following the most recent toll adjustment, adjustments currently requested, and forecast amounts. Applications involving a forward test year shall, in addition, provide information similar to that noted above but show actual or projected actual results for the current year together with explanations for the changes being applied for.

- 7. Concurrent with the filing of Class 1 or 2 applications with the Board, the applicant shall serve as a true copy of the application, including all supporting information as well as its list of interested parties and a timetable for processing the application, on each party identified in the most recent interested party list pursuant to paragraph 8.
- 8. The company shall maintain a list of interested parties which shall include all shippers and other persons who have demonstrated an interest in the company's toll matters. The company shall update the list, as appropriate, and file with the Board a copy of any revised lists.
- 9. The timetable referred to in paragraph 7 shall be prepared by the applicant and shall take the form set out in Attachment 1 hereto. Using the timeframes described in paragraphs 10 to 13, the applicant shall establish the schedule of exact dates, showing the deadlines associated with each of the steps identified herein for processing the application. If,

when determining the dates, any of the deadlines fall on a weekend or statutory holiday, they shall be deemed to fall on the following weekday which is not a statutory holiday and all subsequent deadlines shall be adjusted accordingly. The timetable established by the applicant will be final unless changed by the Board.

10. Any party with an interest in a Class 1 or 2 application who wishes to obtain from the applicant further information in respect of the application shall, within ten (10) days of the filing of a Class 1 application with the Board or within twenty-one (21) days for a Class 2 application, file with the Board and concurrently serve on the applicant a written request for information in accordance with section 18 of the draft *NFB Rules of Practice and Procedure*.
11. Within seventeen (17) days of the filing of a Class 1 application with the Board, or within thirty-five (35) days for a Class 2 application, the applicant shall file with the Board and concurrently serve on each interested party referred to in paragraph 8, the information requests received pursuant to paragraph 10 and its responses thereto, in accordance with section 19 of the draft *NFB Rules of Practice and Procedure*.
12. Any party with an interest in a Class 1 or 2 application may, within twenty-four (24) days of the filing of a Class 1 application with the Board, or within forty-nine (49) days for a Class 2 application, file with the Board, concurrently serve on the applicant and send to each other interested party referred to in paragraph 8, a submission in accordance with subsection 39(4) of the draft *NFB Rules of Practice and Procedure*, detailing any objection or other submission in respect of the application and, if desired, requesting that a public hearing be held to consider the application, providing the reasons for such request.
13. The applicant may, within thirty-one (31) days of the filing of a Class 1 application with the Board, or within sixty (60) days for a Class 2 application, file with the Board and serve on each interested party a reply to any matter raised in any submission received pursuant to paragraph 12.
14. The applicant shall upon receipt of the decision of the Board on a Class 1 or 2 application, serve a copy of the decision and the new tolls on each interested party and on any other person who has filed a submission pursuant to paragraph 12.
15. Except as specified above, the procedures governing applications shall be in accordance with the draft *NFB Rules of Practice and Procedure*.
16. The company shall furnish to the Board's office in Calgary, Alberta twenty (20) copies:
 - (a) within (30) days after the end of each month, of revised forecasts of throughput by source and destination by month and rate of return on equity, for the full test year, taking into account actual results to date and supported by appropriate information;
 - (b) within forty-five (45) days after the end of each quarter of the test year, of actual test year results to date by quarter and revised forecasts for the full test year by

quarter, of the following: revenue, cost of service, throughputs by source and destination, return and rate of return on rate base and equity, supported by appropriate information and in accordance with the policies and principles approved by the Board at the most recent public hearing; such supporting information should include explanation of significant variances; and

(c) by 1 December, of the company's annual financial forecast for the coming year if a toll application has not been filed for that year.

17. The company shall make available for public viewing at its head office copies of the reports described in paragraph 16, covering the most recent two-year period.
18. The company shall, when it has a mid-year toll application before the Board, serve on each interested party referred to in paragraph 8, one (1) copy of each report filed pursuant to paragraph 16. The reports shall be served on interested parties and filed with the Board concurrently.
19. The Board may require the company to furnish from time to time such additional information as the Board deems necessary.

AND IT IS FURTHER ORDERED THAT:

This Order shall come into effect on 10 June 1992 and Order TO-8-90 dated 13 December 1990 shall be revoked effective 10 June 1992.

NATIONAL ENERGY BOARD

J.S.Richardson

Secretary

Date:

File:

**Trans Mountain Pipe Line Company Ltd.
("TMPL")**

**Schedule for Processing Class _____ Application
dated _____**

The procedure applicable to TMPL toll applications to the National Energy Board ("NEB") are set out in NEB Order TO-8-90. Pursuant to paragraph 9 of that Order, TMPL has determined that the following dates are the deadlines for the various steps described in the Order for processing the above-noted toll application. Parties are directed to refer to the Order to determine the service requirements associated with each step. As indicated in the Order, unless otherwise directed by the NEB these dates are final.

Procedure described in TO-8-90**Filing due
no later than****Filing of Application with NEB**

**Interested Party Information
Requests to Applicant**

**Applicant's Responses to Interested
Party Information Requests**

Interested Party Submissions

**Applicant's Reply to Interested
Party Submissions**

(signature)

Toll Adjustment Procedures

Appendix III

File: 4200-T004-3

22 October 1991

Hearing Order RH-3-91 Directions on Procedures

Trans Mountain Pipe Line Company Ltd. Application for Tolls Effective 1 January 1992

By application dated 6 September 1991 ("the application"), Trans Mountain Pipe Line Company Ltd. ("TMPL" or "the Applicant") has applied to the National Energy Board ("the Board") for certain orders respecting tolls under Part IV of the *National Energy Board Act*.

In its application, TMPL indicated that it had reached consensus with interested parties through a process of negotiation on most issues with the exception of the deemed capital structure and the rate of return on common equity. TMPL therefore requested that issues on which consensus had been reached be handled under a written procedure pursuant to the procedures outlined in Order TO-8-90 for Class 2 toll applications and that the Board hold a public hearing limited to unresolved issues at an early date.

Therefore, the Board directs as follows:

PUBLIC VIEWING

1. TMPL shall deposit and keep on file, for public inspection during normal business hours, a copy of its application, amendments, evidence and all documents related thereto in its offices at:

Suite 800, 601 West Broadway
Vancouver, British Columbia V5Z 4C5

A copy of this application is also available for viewing at the Board's office at:

Library
First floor
311 - 6th Avenue S. W.
Calgary, Alberta T2P 3H2

SCOPE OF THE HEARING

2. The Board intends to examine the issues of allowed rate of return on equity and the capital structure for regulatory purposes at the public hearing and, unless otherwise directed by the Board, all other issues will be dealt with by written submission.
3. Following the evidentiary portion of the hearing, final argument shall be heard on all issues addressed at the hearing including those issues dealt with by written submission.

INTERVENTIONS

4. Interventions are to be filed with the Secretary and served on TMPL by 18 November 1991. Interventions shall include all the information set out in subsection 32(1) of Part III to the revised draft *NEB Rules of Practice and Procedure* ("the Rules") dated 21 April 1987.
5. Any party wishing to suggest additional issues for either the written or oral portions of the proceeding is requested to do so when filing its intervention.
6. The Secretary will issue a List of Intervenors, together with a list of the issues to be addressed in the written portion of the proceeding, shortly after 18 November 1991.

APPLICANT'S WRITTEN EVIDENCE

7. Any additional written evidence that the Applicant wishes to present shall unless otherwise directed by the Board, be filed with the Secretary of the Board and served on all parties listed in paragraph 8 by 18 November 1991.

SERVICE TO PARTIES

8. TMPL shall serve a copy of these Directions on Procedures, including the appendices, in either official language as appropriate or as requested, forthwith on all parties listed in Schedule 6 of the application.
9. Once the List of Intervenors is issued by the Board, TMPL shall serve its application, amendments, evidence and all documents related thereto on those Intervenors who have not already been served.
10. Intervenors are reminded that pursuant to section 32 of the Rules, each Intervenor must serve a copy of its intervention on the Applicant and on all other Intervenors once the List of Intervenors has been issued by the Board.

INFORMATION REQUESTS TO TMPL

11. Information requests addressed to TMPL on the application and on the evidence shall be filed with the Secretary and served on all Intervenors to the proceeding by 29 November 1991.
12. The Applicant's responses to information requests made pursuant to paragraph 11 shall be filed with the Secretary and served on all Intervenors to the proceeding by 9 December 1991.

LETTERS OF COMMENT

13. Letters of comment by persons who do not wish to intervene are to be filed with the Secretary and served on TMPL by 16 December 1991.

DIRECT EVIDENCE BY INTERVENORS

14. Intervenor direct evidence on all issues to be dealt with at the public hearing is to be filed with the Secretary and served on TMPL and all Intervenors to the proceeding by 16 December 1991.

WRITTEN SUBMISSIONS BY INTERVENORS

15. Intervenor submissions for the written portion of the hearing shall be filed with the Secretary and served on TMPL and all Intervenors to the proceeding by 16 December 1991.

REPLY BY TMPL TO WRITTEN SUBMISSIONS

16. TMPL shall have until 6 January 1992 to file with the Secretary and serve on all Intervenors, any reply that it may have to the written submissions previously filed by Intervenors.

INFORMATION REQUESTS TO INTERVENORS

17. Information requests addressed to the Intervenors who have filed direct evidence pursuant to paragraph 14 shall be filed with the Secretary and served on TMPL and all other Intervenors by 30 December 1991.
18. Responses to the information requests sent pursuant to paragraph 17 shall be filed with the Secretary and served on TMPL and on all other Intervenors by 10 January 1992.

NOTICE OF HEARING

19. The publications in which TMPL is required to publish the Notice of Public Hearing attached as Appendix I, are listed in Appendix III.

HEARING

20. The hearing will commence at 1:30 p.m. (local time) on Monday, 13 January 1992 at the Ramada Renaissance Hotel (Hastings Room) 1133 West Hastings, Vancouver, British Columbia V6E 3T3.

FILING AND SERVICE REQUIREMENTS

21. Where parties are directed by these Directions on Procedures or by the Rules to file or serve documents on other parties, the following number of copies shall be served or filed:
 - (a) for documents to be filed with the Board, provide 35 copies;
 - (b) for documents to be served on TMPL, provide 3 copies; and
 - (c) for documents to be served on Intervenors, provide 1 copy.
22. Parties filing or serving documents at the hearing shall file five copies with the Hearing Clerk, ten copies with the Board counsel, serve three copies on the Applicant and provide sufficient copies for all other parties present at the hearing.
23. Persons filing letters of comment shall serve one copy on TMPL and file one copy with the Board, which in turn will provide copies for all other parties.
24. Parties filing or serving documents fewer than five days prior to the commencement of the hearing shall also bring to the hearing a sufficient number of copies of the document for use by the Board and other parties present at the hearing.
25. Parties are reminded that pursuant to subsections 8(4) and 9(1) of the Rules, a document is not filed or served until it is received by the intended recipient.

TIMETABLE OF EVENTS

26. A summary of deadlines for filing and service is listed in Appendix II.

SIMULTANEOUS TRANSLATION

27. Each party is requested to indicate in its intervention the official language it intends to use at the public hearing. If it appears that both languages will be used, simultaneous translation will be provided.

GENERAL

28. Unless otherwise directed by the Board, the hours of sitting will be from 8:30 a.m. to 1:00 p.m.
29. All parties are asked to quote Hearing Order RH-3-91 and File 4200-T004-3 when corresponding with the Board in this matter.
30. Subject to the foregoing, the procedure to be followed shall be governed by the Rules.
31. For further information on the application described herein, or the procedures governing the Board's review, contact Diana Saunders, Regulatory Support Officer at (403) 299-2716.

National Energy Board

G. A. Laing
Secretary

NATIONAL ENERGY BOARD

NOTICE OF PUBLIC HEARING**Trans Mountain Pipe Line Company Ltd.
Application for Tolls Effective 1 January 1992**

The National Energy Board ("the Board") will conduct a hearing to obtain the evidence and the relevant views of the interested parties on an application dated 6 September 1991 by Trans Mountain Pipe Line Company Ltd. ("TMPL") pursuant to Part IV of the *National Energy Board Act* for certain orders respecting tolls that TMPL may charge for services rendered after 1 January 1992.

Unless otherwise directed by the Board, this hearing will be held in two parts: one part, a public hearing dealing with capital structure and the allowed rate of return and a second part, a written submission proceeding dealing with all other issues. The public hearing will commence at 1:30 p.m. (local time) on 13 January 1992 at the Ramada Renaissance Hotel (Hastings Room) in Vancouver, British Columbia.

Anyone wishing to intervene in the hearing must file a written intervention with the Secretary of the Board and serve three copies on TMPL at the following address:

Mr. G. A. Irving
Vice President, Secretary & General Counsel
Trans Mountain Pipe Line Company Ltd.
800 - 601 West Broadway
Vancouver, British Columbia V5Z 4C5
Telephone: (604) 876-6711
Facsimile: (604) 876-3911

TMPL will provide a copy of the application to each Intervenor.

The deadline for receipt of written interventions is 18 November 1991. The Secretary will then issue a List of Intervenors, together with a list of issues to be addressed in the written portion of the proceeding.

Anyone who does not wish to intervene in the hearing but would like only to comment on the application should write to the Secretary of the Board and send a copy to TMPL. The deadline for receipt of comments is 16 December 1991.

Information on the procedures of this hearing (Hearing Order RH-3-91) or the draft *NEB Rules of Practice and Procedures* governing all hearings (both documents are available in English and French) may be obtained by writing the Secretary or telephoning the Board's Regulatory Support Office at (403) 292-4800.

G. A. Laing
Secretary, National Energy Board
311 - 6th Ave S. W. Calgary, Alberta T2P 3H2
Facsimile No. (403) 292-5503

TIMETABLE

| | |
|---|------------------|
| TMPL application filed | 6 September 1991 |
| Additional evidence from TMPL due | 18 November 1991 |
| 18 November 1991 | |
| 29 November 1991 | |
| Responses by TMPL due | 9 December 1991 |
| Intervenors' direct evidence due | 16 December 1991 |
| Letters of comment by other parties due | 16 December 1991 |
| Written submissions by Intervenors due | 16 December 1991 |
| Information requests to Intervenors due | 30 December 1991 |
| Reply by TMPL to written submissions of Intervenors | 6 January 1992 |
| Responses by Intervenors due | 10 January 1992 |
| Hearing starts in Vancouver | 13 January 1992 |

LIST OF PUBLICATIONS

The publications in which the Applicant is required to publish the public notice are as follows:

| <u>Publication</u> | <u>City</u> |
|-------------------------------------|-----------------------------|
| NOTICE IN ENGLISH: | |
| "Times Colonist" | Victoria, British Columbia |
| "The Sun" and "Vancouver Province" | Vancouver, British Columbia |
| "The Edmonton Journal" | Edmonton, Alberta |
| "Calgary Herald" | Calgary, Alberta |
| "Globe and Mail (National Edition)" | Toronto, Ontario |
| NOTICE IN FRENCH: | |
| "Le Soleil de Colombie" | Vancouver, British Columbia |
| "Le Franco-albertain" | Edmonton, Alberta |
| NOTICE IN BOTH ENGLISH AND FRENCH: | |
| "Canada Gazette" | Ottawa, Ontario |

Appendix IV

File: 4200-T004-3
4 December 1991

Order AO-1-RH-3-91

Amendment to Directions on Procedures

Trans Mountain Pipe Line Company Ltd. ("TMPL") Application For Tolls Effective 1 January 1992

WHEREAS the National Energy Board ("the Board") issued Order RH-3-91 dated 22 October 1991 setting out Directions on Procedure for the hearing for certain orders respecting tolls under Part IV of the *National Energy Board Act* for new tolls to be effective 1 January 1992;

AND WHEREAS various parties to the hearing have requested that the hearing be postponed in order to avoid conflicts with other hearings before the Board;

AND WHEREAS the Board has decided to reschedule the hearing;

IT IS ORDERED THAT paragraphs 11 through 18, and 20, and Appendix II of Order RH-3-91 be rescinded and the following paragraphs and Appendix II be substituted therefor:

INFORMATION REQUESTS TO TMPL

11. Information requests addressed to TMPL on the application and on the evidence shall be filed with the Secretary and served on all intervenors to the proceeding by 13 December 1991.
12. The Applicant's responses to information requests made pursuant to paragraph 11 shall be filed with the Secretary and served on all intervenors to the proceeding by 23 December 1991.

LETTERS OF COMMENT

13. Letters of comment by persons who do not wish to intervene are to be filed with the Secretary and served on TMPL by 20 January 1992.

DIRECT EVIDENCE BY INTERVENORS

14. Intervenor direct evidence on all issues to be dealt with at the public hearing is to be filed with the Secretary and served on TMPL and all intervenors to the proceeding by 6 January 1992.

WRITTEN SUBMISSIONS BY INTERVENERS

15. Intervenor submissions for the written portion of the hearing shall be filed with the Secretary and served on TMPL and all intervenors to the proceeding by 20 January 1992.

REPLY BY TMPL TO WRITTEN SUBMISSIONS

16. TMPL shall have until 24 February 1992 to file with the Secretary and serve on all intervenors, any reply that it may have to the written submissions previously filed by intervenors.

INFORMATION REQUESTS TO INTERVENORS

17. Information requests addressed to the intervenors who have filed direct evidence pursuant to paragraph 14 shall be filed with the Secretary and served on TMPL and all other intervenors by 3 February 1992.
18. Responses to the information requests sent pursuant to paragraph 17 shall be filed with the Secretary and served on TMPL and on all other intervenors by 17 February 1992.

HEARING

20. The hearing will commence at 1:30 p.m. (local time) on Monday, March 2, 1992 at the Ramada Renaissance Hotel (Hastings Room) 1133 West Hastings, Vancouver, British Columbia V6E 3T3.

National Energy Board

G. A. Laing
Secretary

AO-1-RH-3-91

Attachment to Order AO-1-RH-3-91

APPENDIX II

Page 1 of 1

TIMETABLE

| | |
|---|------------------|
| TMPL application filed | 6 September 1991 |
| Additional evidence from TMPL due | 18 November 1991 |
| Interventions to be filed | 18 November 1991 |
| Information requests to TMPL due | 13 December 1991 |
| Responses by TMPL due | 23 December 1991 |
| Intervenors' direct evidence due | 6 January 1992 |
| Letters of comment by other parties due | 20 January 1992 |
| Written submissions by Intervenors due | 20 January 1992 |
| Information requests to Intervenors due | 3 February 1992 |
| Responses by Intervenors due | 17 February 1992 |
| Reply by TMPL to written submissions of Intervenors | 24 February 1992 |
| Hearing starts in Vancouver | 2 March 1992 |

Amended: 4 December 1991

AO-1-RH-3-91

Appendix V

File: 4200-T004-3
23 December 1991

TO ALL INTERESTED PARTIES TO THE RH-3-91 PROCEEDING

Re: Trans Mountain Pipeline Company Ltd. ("TMPL")
Class 3 Toll Application dated 6 September 1991
Revised List of Issues and Filing Dates

List of Issues

The Board has considered IPAC's letter of 13 December 1991 and decided to amend the list of issues for the oral portion of the hearing to include the items raised. Accordingly the list of issues attached to the Board's letter dated 6 December 1991 is amended to include the following additional issues to be considered in the oral portion of the proceedings:

2(c)(ii) The appropriate toll design for the proposed facilities to be constructed to accommodate MTBE shipments.

2(c)(iii) The adequacy of the existing throughput forecast methodology employed by TMPL and an examination of alternatives.

An amended List of Issues is Attachment 1.

Filing Dates

Board Counsel has received a telephone request from Trans Mountain for an extension to the date for the filing of its additional direct evidence from 18 November 1991 to 6 January 1992. The Board has decided to grant this request and has also decided to extend the date for the filing of direct evidence by intervenors from 6 January 1992 to 20 January 1992 in order to allow them time to review Trans Mountain's submission. An amended Appendix II to Order RH-3-91 as amended, reflecting these changes, is Attachment 2.

Information Requests

Trans Mountain is expected to use its best efforts to respond in a timely fashion to any information requests regarding its additional evidence.

Yours truly,

G. A. Laing
Secretary

TRANS MOUNTAIN PIPE LINE COMPANY LTD.

LIST OF ISSUES FOR RH-3-91 AS AMENDED 20 DECEMBER 1991

NEB Issue
Number

1. Written Proceeding

In addition to the usual rate base, cost of service and throughput issues arising from the Board's mandate under Part IV of the *National Energy Board Act*, the Board intends to include the following issues within the scope of the written procedure for the hearing, described within the application as items on which the Task Forces have reached consensus, namely:

(a) Rate of Return Task Force Issues

- (i) Cost of debt for the rate of return calculation (Task Force Issue 1)
- (ii) Toll trigger mechanism (Task Force Issue 3)

(b) Cost of Service Task Force Issues

- (i) General cost control, Continuous Improvement Program (Task Force Issue 1)
- (ii) Heavy crude surcharge methodology (Task Force Issue 2)
- (iii) Cost allocation to non-utility operations (Task Force Issue 3)
- (iv) Line fill and working stock (Task Force Issue 4)

2. Oral Proceeding

Unless otherwise specified, only the following issues will be considered at the oral proceeding:

- (a) The following issues, unresolved through TMPL's Rate of Return Task Force process:
 - (i) The appropriate deemed capital structure for the purpose of calculating the allowed rate of return on rate base.
 - (ii) The appropriate allowed rate of return on deemed common equity.
- (b) The following issue upon which the Rate of Return Task Force reached consensus:

- (i) Adjustments to the allowed cost of debt.
- (c) The following issues raised by interested parties:
 - (i) The need for TMPL to undertake a depreciation rate study for review by the Board and the scope of such a study and the process by which the study and any alternatives to the resulting proposal should be examined.
 - (ii) The appropriate toll design for the proposed facilities to be constructed to accommodate MTBE shipments.
 - (iii) The adequacy of the existing throughput forecast methodology employed by TMPL and an examination of alternatives.

Amended APPENDIX II of Order RH-3-91

TIMETABLE

| | |
|---|------------------|
| TMPL application filed | 6 September 1991 |
| 18 November 1991 | |
| 13 December 1991 | |
| Responses by TMPL due | 23 December 1991 |
| Additional evidence from TMPL due | 6 January 1992 |
| Intervenors' direct evidence due | 20 January 1992 |
| Written submissions by Intervenors due | 20 January 1992 |
| Letters of comment by other parties due | 20 January 1992 |
| Information requests to Intervenors due | 3 February 1992 |
| Responses by Intervenors due | 17 February 1992 |
| Reply by TMPL to written submissions of Intervenors | 24 February 1992 |
| Hearing starts in Vancouver | 2 March 1992 |

Amended: 20 December 1991

Appendix VI

ORDER TOI-3-91

IN THE MATTER OF the *National Energy Board Act* ("the Act") and the regulations made thereunder: and

IN THE MATTER OF an application dated 6 September 1991 by Trans Mountain Pipe Line Company Ltd. ("TMPL") for an adjustment of its tolls; filed with the Board under File 4200-T004-3.

BEFORE the Board on Wednesday, the 4th day of December, 1991.

WHEREAS TMPL filed an application dated 6 September 1991 for an order pursuant to Part IV of the Act to adjust its tolls effective 1 January 1992;

AND WHEREAS the Board has now issued Order RH-3-91 and AO-1-RH-3-91 prescribing the procedures to be followed in processing this application;

AND WHEREAS the Board has decided that the applied-for tolls should be charged on an interim basis pending a decision on the application after the March 1992 toll hearing:

IT IS ORDERED THAT:

Pursuant to subsection 19(2) and section 59 of the Act, the tolls set out in Schedule "A" attached hereto are to be charged on an interim basis effective 1 January 1992, and will remain in effect until the day before the Board's final order on TMPL's application comes into effect.

NATIONAL ENERGY BOARD

G. A. Laing
Secretary

Schedule "A"

**Toll To Be Charged On An Interim Basis
Effective 1 January 1992**

Petroleum with a density less than 904 kilograms
per cubic metre at 15 degrees Celsius:

| <u>From</u> | <u>To</u> | <u>Toll Per Cubic Metre</u> |
|-------------|-----------|-----------------------------|
| Edmonton | Sumas* | \$8.222 |
| Edmonton | Burnaby | \$9.531 |
| Edson | Sumas* | \$6.876 |
| Edson | Burnaby | \$8.191 |
| Kamloop | Sumas* | \$2.612 |
| Kamloops | Burnaby | \$3.928 |

Heavy Petroleum with a density greater than 904 kilograms
per cubic metre at 15 degrees Celsius:

Above tolls plus 20%

Edson Gathering Charge:

\$0.479

Westridge Loading Charge:

\$0.251

Refined and Partially Refined Petroleum Charges:

1. Volumetric Tolls

| | <u>From</u> | <u>To</u> | |
|-----------------------------|-------------|-----------|---------|
| Refined Petroleum | Edmonton | Kamloops | \$6.063 |
| Shell Special Stream | Edmonton | Burnaby | \$8.752 |
| Petro-Canada Special Stream | Edmonton | Burnaby | \$9.510 |
| Imperial Special Stream | Edmonton | Burnaby | \$8.761 |

2. Monthly Facilities Charges

| | |
|----------------------|----------|
| Petro-Canada Inc. | \$19,571 |
| Imperial Oil Limited | \$15,818 |
| Shell Canada Limited | \$9,508 |

*a point on the international boundary near Sumas, British Columbia where the pipeline connects to Trans Mountain Oil Pipe Line Corporation.

TOI-3-91

Appendix VII

ORDER AO-1-TOI-3-91

IN THE MATTER OF the *National Energy Board Act* ("the Act") and the regulations made thereunder; and

IN THE MATTER OF an application dated 6 September 1991 by Trans Mountain Pipe Line Company Ltd. ("TMPL") for an adjustment of its tolls; filed with the Board under File 4200-T004-3.

BEFORE the Board on Friday, the 20th day of December, 1991.

WHEREAS TMPL filed an application dated 6 September 1991 for an order pursuant to Part IV of the Act to adjust its tolls effective 1 January 1992;

AND WHEREAS the Board has now issued Order RH-3-91 and prescribing the procedures to be followed in processing this application;

AND WHEREAS the Board has also issued Order TOI-3-91 specifying the tolls to be charged on an interim basis pending a decision on the application after the March 1992 toll hearing;

AND WHEREAS Schedule "A" of Order TOI-3-91 contains an error with respect to the Shell Special Stream toll;

IT IS ORDERED THAT:

Schedule "A" of Order TOI-3-91 is hereby rescinded and the attached Revised Schedule "A" substituted therefor. Tolls specified in Revised Schedule "A" are to be charged on an interim basis effective 1 January 1992, and will remain in effect until the day before the Board's final order on TMPL's application comes into effect.

NATIONAL ENERGY BOARD

G. A. Laing
Secretary

Schedule "A"

Toll To Be Charged On An Interim Basis Effective 1 January 1992

Petroleum with a density less than 904 kilograms
per cubic metre at 15 degrees Celsius:

| <u>From</u> | <u>To</u> | <u>Toll Per Cubic Metre</u> |
|-------------|-----------|-----------------------------|
| Edmonton | Sumas* | \$8.222 |
| Edmonton | Burnaby | \$9.531 |
| Edson | Sumas* | \$6.876 |
| Edson | Burnaby | \$8.191 |
| Kamloop | Sumas* | \$2.612 |
| Kamloops | Burnaby | \$3.928 |

Heavy Petroleum with a density greater than 904 kilograms
per cubic metre at 15 degrees Celsius:

Above tolls plus 20%

Edson Gathering Charge:

\$0.479

Westridge Loading Charge:

\$0.251

Refined and Partially Refined Petroleum Charges:

1. Volumetric Tolls

| | <u>From</u> | <u>To</u> | |
|-----------------------------|-------------|-----------|---------|
| Refined Petroleum | Edmonton | Kamloops | \$6.063 |
| Shell Special Stream | Edmonton | Burnaby | \$8.732 |
| Petro-Canada Special Stream | Edmonton | Burnaby | \$9.510 |
| Imperial Special Stream | Edmonton | Burnaby | \$8.761 |

2. Monthly Facilities Charges

| | |
|----------------------|----------|
| Petro-Canada Inc. | \$19,571 |
| Imperial Oil Limited | \$15,818 |
| Shell Canada Limited | \$9,508 |

*a point on the international boundary near Sumas, British Columbia where the pipeline connects to Trans Mountain Oil Pipe Line Corporation.

AO-1-TOI-3-91

